

Disciplinary Commons 2009-2010 Evaluation Report

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BACKGROUND

Disciplinary Commons is an NSF-funded project designed to encourage educators within the field of Computer Science to reflect on, document and share knowledge of their teaching practices. Moreover, it is designed to develop a community of computing educators, and, more generally, to improve the quality of teaching in Computer Science. In monthly half-day meetings, educators teaching the same class, but perhaps at different institutions, meet over the course of one academic year to develop a course-specific portfolio and to discuss a set of teaching-related topics through the discipline-specific lens of computing education.

The first iteration of the project was completed during the 2005-2006 academic year, with one Disciplinary Commons held in the Puget Sound region of the U.S. and one in the United Kingdom. The second iteration was held during the 2009-2010 academic year with one Disciplinary Commons held in the greater St. Louis area and one in the U.K. In 2005-2006, the sessions were facilitated by the project co-PIs, and an important part of the 2009-2010 iteration was to explore whether the materials, structure, and content of the Disciplinary Commons were adaptable. Hence, two new facilitators conducted the 2009-2010 sessions, with the ongoing guidance of the project co-PIs.

The University of Washington Office of Educational Assessment (OEA) has been engaged as an evaluator on this project to understand more about the experience of Disciplinary Commons participants, and to evaluate the short- and long-term impact of the program. This report summarizes results from a pre- and post-online survey conducted with the two 2009-2010 cohorts (i.e., St. Louis area and U.K.) and pre- and post-interviews conducted with both facilitators.

METHODS & PARTICIPANTS

Facilitators of the 2009-2010 Disciplinary Commons provided OEA with email addresses of current participants (Seven from the U.S. cohort and 13 from the U.K. cohort). OEA sent email invitations to all participants to take part in both the pre- and post-surveys. The pre-survey was administered to both Disciplinary Commons just prior to the start of the program (August 2009 for the U.S. group and October 2009 for the U.K. group) and the post-survey was administered shortly after the final meeting (November, 2010, for the U.S. group¹ and July, 2010, for the U.K. group). On the pre-survey, 19 of 20 participants responded for a 95% response rate: 7 of 7 (100%) for U.S., 12 of 13 (92.3%) for U.K. On the post-survey, 17 of 20 participants responded for an 85% response rate: 7 of 7 (100%) for U.S., 10 of 13 (76.9%) for U.K.

The pre-survey consisted of 21 and 24 questions (U.K. and U.S. groups, respectively) in five sections: (1) Information about You and Your Institution; (2) Community of Practice; (3) Reflections on Teaching Practices; (4) Portfolios and (5) Disciplinary Commons. The post-surveys consisted of 22 questions, in four sections (1) Portfolio and Participation; (2) Your Disciplinary Commons Experience (some of these questions were repeated from the pre-survey); (3) Community of Practice; and (4) Evaluation. Aside from the fact that the U.S. pre-survey included three additional questions in Section 1², questions were nearly identical for both cohorts, except that the wording was altered slightly to accommodate different language use in the U.S. and U.K. Appendix A includes both the pre- and post-versions of the U.S. survey in their entirety.

The pre-interviews for both the U.S. and U.K. facilitators took place in November, 2009, three months into the U.S. Disciplinary Commons and one month into the U.K. Disciplinary Commons. The pre-interview protocol consisted of six questions and interviews lasted between 30- and 45-minutes. The post-interview for the U.K. facilitator took place in July 2010 and the post-interview for the U.S. facilitator took place in November 2010. The post-interview protocol consisted of four questions and interviews lasted between 30- and 45-minutes. See Appendix A for a copy of both the pre- and post-protocols in their entirety.

SUMMARY OF RESULTS

This section provides a brief summary of results based on the evaluator's interpretation of all data sources. It is separated into four sections: (1) Participants' Background; (2) Impact of the Disciplinary Commons; and (3) Evaluation. Within each section, a summary of data from both the participant and facilitator perspective are presented.

Please see Appendix B for detailed, descriptive findings from all survey items, as well as comparisons across both cohorts; and see Appendix C for a detailed account of the pre- and post-interviews with adopters.

¹ As a result of two cancellations due to inclement weather, the U.S. group decided to postpone its final meeting until November, 2010, giving participants an extended period of time to complete their course portfolios.

² The U.S. survey included the following questions that were not included on the U.K. version: 1) Which of the following best describes the institution where you teach?; 2) Which of the following best describes your current position within your institution?; and 3) Which of the following types of courses in Software Engineering are offered at your institution?

A. Participants' Background

One important aspect of this evaluation was to understand more about the background of participants coming into the Disciplinary Commons and the extent to which they had previous experience with the types of reflection and activities that were central to the program.

1. *Participants' teaching experience*

U.S. participants reported that they had been teaching an average of nine years (median = 7 years) and U.K. participants reported that they had been teaching longer, on average 16 years (median = 13 years). In terms of how long participants had been teaching *software engineering courses*, participants indicated a range from new hire to 20 years.

By and large, more U.K. participants reported that there were institutional restrictions on the types of changes that they could make to the module/course that they were investigating during the Disciplinary Commons as compared with U.S. participants (9 of 12 or 75% of U.K. participants said "Yes" or "Kind Of" compared with 3 of 7 or 42.9% of U.S. participants).

2. *Existing community*

Most participants indicated discussing teaching with other instructors in their department (14 of 19, 73.7%, said they did so "many times during each term"), and the frequency of discussion with other individuals both within and outside their own institutions was substantially lower.

Disciplinary Commons participants felt that they had adequate opportunities (\underline{M} s = 3.63 and 3.53, respectively on a scale from 1 "Strongly Disagree" to 5 "Strongly Agree") to discuss issues of teaching and learning with a community of colleagues within their departments and institutions. However, they were less likely to agree that they are connected to colleagues in their geographic region who are interested in teaching and learning (\underline{M} = 2.84 or close to "Neutral").

In contrast with U.K. participants, U.S. participants were significantly more likely to report that they feel as though they have adequate opportunities to discuss issues of teaching and learning in the discipline with their colleagues (\underline{M} s = 4.29 v. 3.25, $p < .05$).

Disciplinary Commons did not have a considerable amount of experience observing others' teaching (74.7% indicated they had done so once or twice or not at all). When asked for what reason they observed others' teaching, both U.S. and U.K. participants were most likely to cite external motivation such as institutional requirements. Responses were similar with regards to having their own teaching observed.

3. *Scholarly work on teaching and learning*

Nearly 70% of participants indicated that they had published and/or presented scholarly work on computing education. U.K. participants were more likely to report having done so in comparison to U.S. participants (42.9% of U.S. participants v. 83.3% of U.K. participants). Nevertheless, the majority of participants (63.2%) indicated that the percentage of their professional work spent doing scholarly work on computing education was 5% or less.

4. Previous experience with portfolios

a. Teaching Portfolio

Only 21.1% of participants indicated they had completed at least a partial teaching portfolio. The most common reasons for putting together a teaching portfolio included for a job application and a requirement for promotion/tenure. Most of these individuals had shared the portfolio before, but primarily with other instructors in their departments.

All participants gave their opinions about the primary purpose of teaching portfolio, the most common response being the opportunity to reflect on and improve their teaching and enhance students' learning. As one participant said:

Reflection on teaching and learning for the purposes of positively improving student learning experience and achieving the learning outcomes.

In terms of the benefits of *sharing* their teaching portfolio, participants mentioned the benefits of getting feedback from others and making improvements to their courses and teaching. One participant summed up the benefits as follows:

It provides evidence of an individual's teaching effectiveness and helps administrative personnel in its decision making. It can also serve to provide ideas and/or motivation to other faculty members.

When asked whether they had any reservations about sharing their teaching portfolios, most indicated they did not, but some did expressed concern about the risk that their work might be judged inferior to that of their colleagues.

b. Course Portfolio

When asked whether they have ever constructed a *course portfolio*, response patterns were similar to those for a teaching portfolio. Only a minority had completed at least a partial portfolio.

Participants were most likely to indicate that they had put together a course portfolio as a requirement for a course, and all who had constructed a course portfolio or at least a "partial" one said that they had shared it with others, most frequently with other departmental instructors at their institution and other instructors at their institution outside of their department.

When asked what they thought the benefits of *sharing* their course portfolio were, participants often cited the opportunity to get feedback from others to improve the course, document best practices, and preserve continuity in a course when instructors change.

5. Facilitators' background

One facilitator had a fairly extensive history with one co-PI, and the other had a colleague who participated in the previous Disciplinary Commons in 2005-2006. They both indicated they were motivated, at least in part, to facilitate because of an interest in develop a community of discipline-focused instructors and participating in conversations about teaching within their discipline.

B. Impact of the Disciplinary Commons Experience

1. Attendance and Engagement

The majority of participants (14 of 17, 82.4%) missed no more than one Disciplinary Commons session and missed no more than one monthly “homework” assignment (11 of 17, 64.7%). The facilitators noted that they were impressed and encouraged by the attendance and degree of participant engagement.

Several participants commented, when asked what they could improve about the experience, that the time commitment was perhaps too substantial for some participants. As a result, activities such as peer review were sometimes incomplete because of inadequate time. One of the facilitators made similar comments.

However, both facilitators commented that participants were extremely engaged in their discussion sessions, often going over time, and expressing a great deal of enthusiasm for the topics.

2. Portfolio itself

In general, participants’ attitudes about the purpose of a course portfolios did not change substantially between the pre- and post-surveys; however, their agreement with the statement, “I understand the difference between a teaching portfolio and a course portfolio,” did increase substantially (from $M = 3.05$ and $M = 3.76$, with 1 = “Strongly Disagree” and 5 = “Strongly Agree”).

The goal of completing a course portfolio was generally met. When asked about the status of their course portfolio, seven participants (41.1%) indicated that all of the components were complete but the portfolio still needs revisions and/or refinement and six participants (35.3%) said that it was complete. Responses from the U.S. cohort were somewhat more enthusiastic on this front than from the U.K. cohort, probably because the U.S. group had substantially more time to complete their portfolios. The U.K. facilitator noted that everyone in his group had some kind of deliverable by the end of the Commons, but they varied in their completeness. Several U.K. participants also expressed concerns about sharing their portfolios because they required substantial revision.

Participants mentioned that they will use their course portfolio for a wide array of purposes including self-reflection, to document course changes over time, and to provide a guide for others teaching the course in the future. Several participants also mentioned that they might use the course portfolio, or some portion of it, for promotion/tenure purposes. The majority of participants (13 of 17, 76.5%) indicated they would share their portfolio, most likely with instructors from their own departments.

3. Increased reflection

Both adopters felt that the Disciplinary Commons was very effective in encouraging participants to reflect on their teaching practices. The U.S. adopter explained, stating:

The reason is that we forced them to take time to think about what they do. [This was] especially true in the peer observations...and the portfolios were clearly about the participant documenting their thought processes.

The facilitators also commented that across the sessions, there was an increase in the amount of discussion related to why instructors did what they did in the classroom. Over half of participants (58.8%) agreed or strongly agreed with the statement “As a result of my Disciplinary Commons Experience, I have a clearer understanding of why I teach this course the way that I do.”

In addition, most participants (76.4%) indicated that, at least to some extent, they had “come to a better understanding of their teaching philosophy,” with U.K. participants affirming this change more strongly than U.S. participants.

Although there was no increase pre- to post- in participants' self-reported frequency of reflection on their own teaching, there was an increase in how often they documented these reflections. On the pre-survey, only 10.5% of participants indicated they documented their reflections at least several times each term, and 15.8% indicated never doing so. On the post-survey, 23.5% indicated they documented their reflections at least several times during each term, and none indicated not doing it at all.

4. Learning from peers

Perhaps the most striking finding across all data sources is that participants clearly valued and benefitted from the opportunity to interact with a group of like-minded peers. They reported that informal interactions in small groups and plenary discussions were the most valuable types of interactions (\underline{M} s = 3.60 and 3.44, on a scale from 1 "Not at all valuable" to 4 "Extremely valuable").

On the pre-survey, participants described what aspects of the program they thought would be most valuable, and on the post-survey, they reflected on what was, in fact, most valuable. At both time points, the most commonly cited aspects included the opportunity to share (e.g., teaching techniques, best practices) and interact with a group of colleagues who are interested in teaching and learning in computing education. On the post-survey, participants mentioned specifically the opportunity to network with others and they appreciated the openness of the participants and the relaxed atmosphere that the Commons provided.

On the post-survey, all but one participant (94.1%) indicated they had, at least somewhat, "gained new ideas for teaching practices from other Disciplinary Commons participants," and "adopted practices from other Disciplinary Commons participants" (64.7% and 47.1%, respectively, indicated they had "definitely" done so).

During the Disciplinary Commons experience, participants readily agreed that they learned about other participants' perspectives and felt comfortable expressing their own perspectives (\underline{M} s = 4.82 and 4.76, on a scale from 1 "Strongly Disagree" to 5 "Strongly Agree.") Moreover, participants strongly disagreed (\underline{M} = 1.47) that at times, they held back their own opinion to avoid conflict.

When asked about the most important insight they gained during their Disciplinary Commons experience, participants often mentioned the variety of "valid approaches" and the opportunity to collaborate with other Computer Science teachers. As one participant said:

Perhaps the most important thing was to realize the commonality of issues which exists among software engineering colleagues and the approaches used to tackle these issues.

When asked to explain how these insights arose, participants were most likely to report that informal discussions with their peers led to the new knowledge that they gained. One participant summed up her/his explanation as follows:

Observation of some very skilled individuals and their wise comments and the interesting and effective techniques they deployed. Also, that the same problems are reflected in many different institutions.

Facilitators confirmed that interaction with peers was particularly valuable. During the pre-interview, both participants mentioned peer interaction as the most rewarding benefit so far, and in the post-interview, they both mentioned discussion, peer observation, and /or networking at the most valuable parts of the Disciplinary Commons experience for participants.

5. Changes to teaching practices

There was some evidence that during the course of the Disciplinary Commons, participants became more likely to change their teaching practices. Participants' self-rated frequency of "trying a new teaching practice based on

student feedback” increased substantially, from only 26.3% indicating doing so at least several times each term on the pre-survey to 47.1% on the post-survey. “Trying a new teaching practice based on scholarly work” also became more likely from only 36.9% indicating on the pre-survey doing so at least *once* per term to 58.9% indicating doing so at least once per term on the post-survey.

During the Disciplinary Commons year, 42.9% of participants indicated they had, at least somewhat, changed their teaching practices. More convincingly, 76.5% had, at least somewhat, made plans to change the course that was the topic of their portfolio.

6. Sustained community

During the course of the program, participants seemed to establish valuable connections with their Disciplinary Commons peers³, with the majority of participants (13 of 17 or 76.4%) agreeing or strongly agreeing that they will stay in touch with their Disciplinary Commons cohort in the future. Participants were most likely to mention that they would contact members of their cohort for purpose of teaching collaboration (78.6%) or journal/conference submissions/grant applications (57.1%).

Facilitators did indicate there was some momentum around the idea of future communication and/or collaboration, but they also expressed some doubt. One noted that one of the “drivers” behind such an endeavor was moving institutions; the other suggested that a great deal of support would be needed in order for the sustained contact to occur.

The U.S. facilitator noted that one Disciplinary Commons members was working to organize an “International Disciplinary Commons” in Malaysia and/or other Asian locations, but that in this version, there would be no course portfolios, just a focus on peer interaction and reflective teaching. At the time of the interview, the facilitator was seeking funding for this endeavor.

C. Evaluation

In a sense, participants’ evaluation of the program can be expressed, in part, as their own assessment of the impact of the experience, as described in the previous section. They did provide direct ratings of the quality of the experience, and some suggestions for improvement, described in Section 1 below. An important source of evaluative information came from the facilitators who had adopted the content for the first time. Their feedback is summarized in three sections below: (2) Preparation and recruitment; (3) Key factors; and (4) Suggestions for improvement.

1. Additional participant evaluation

Disciplinary Commons participants enjoyed their experience and were in strong agreement that their decision to take part in the Disciplinary Commons was a good one (\underline{M} s = 4.71 and 4.41, or between “Agree” and “Strongly Agree”). On a scale of 1 “Poor” to 5 “Excellent,” participants rated the facilitator’s contribution to the Disciplinary Commons (\underline{M} = 4.35) and their effectiveness in guiding discussions most highly. Furthermore, participants rated the Disciplinary Commons overall very highly (\underline{M} = 4.35).

On the post-survey, several participants mentioned that travel time and certain activities were somewhat less valuable than other program components. More specifically, participants reported that the peer review process was sometimes difficult because participants were not always able to keep up with the demands of the commons and several mentioned that traveling to different sites was challenging.

³ Approximately one-half of all participants reported that they knew some of the Disciplinary Commons participants from previous experience.

The remaining participants provided a wide array of suggestions including having more flexibility in the structure of the portfolios and choosing a more diverse group of people and/or courses for the Disciplinary Commons program.

2. Preparation and recruitment

Facilitators noted that they both struggled somewhat with recruitment, with both giving the explanation that academic institutions generally value teaching less than research. They used both generalized (e.g., announcements at conferences, online mailing lists) and fairly individualized (i.e., emails) recruitment techniques. One suggested that the program was particularly appealing to individuals who were focusing more on teaching in their careers and who might not be on a more traditional academic pathway.

Both interviewees suggested they would have benefited from additional information about the program before deciding to participate. They differed in the extent to which they prepared for their first session and received assistance from the project co-PIs. One facilitator estimated spending approximately 40 – 60 hours in recruitment, 40 – 60 in preparing for the first session, and 5 – 10 hours with logistics (e.g., scheduling rooms, catering). Both indicated they did *not* prepare extensively for each session and relied heavily on the existing DC materials.

3. Key factors

Both participants commented on factors they thought worked very well and were keys to success. Most prominent, as described above, was discussions among like-minded peers teaching similar topics. Both indicated that the discussions by themselves were essential in encouraging participants to reflect, and in enhancing participants' learning.

The U.S. facilitator also highlighted peer observation of teaching as a particularly useful exercise in his cohort.

The U.K. facilitator suggested that having different DC members "host" different sessions was essential in ensuring that the group took ownership of the process and that, for at least one session, participants carved out time in their schedule for the session.

3. Suggestions for Improvement

In the pre-survey, the U.S. facilitators mentioned receiving formal feedback (in a three-question open-ended survey) from participants, leading him to have more detailed agendas for each session. He also noted that the only support he could have used more of was in the logistical domain (i.e., working to set up rooms and catering).

The U.K. facilitator commented specifically on the time commitment required of both participants and facilitators. In particular, the peer feedback process suffered when participants could not find the time to prepare their drafts and/or review drafts given to them. This comment was in line with what several U.K. participants said about what could have been improved about the experience.

APPENDIX A: INSTRUMENTS

U.S. PRE-SURVEY

The University of Washington's Office of Educational Assessment (OEA) has been contracted to conduct an evaluation of *Disciplinary Commons*. As a participant in this program, we are asking you to complete the following survey to provide some background information about you and baseline information we can compare to information you provide at the end of the program. The questions ask for some basic information about you as well as more specific aspects of your teaching activities and scholarly work in computing education, experience with portfolios, and perceptions about teaching and learning.

The survey should take approximately 10 to 15 minutes to complete. Your responses will remain confidential; the information you provide will be linked to a code number assigned to you automatically by the UW WebQ system. In a separate list, your email address will be linked to your code number. The purpose of maintaining a link to the code numbers is to match up your responses with responses you will provide at the end of the programs and possibly at points later in the future. Only OEA evaluation staff will have access to the code list.

The information you provide will be summarized in a report for the co-PIs of the *Disciplinary Commons* grant. The data will be presented in an aggregated fashion and no identifying information will be included in the report. Your participation is voluntary; you may skip any question you do not wish to answer.

If you have any questions about this survey or how the information will be used, please contact Bayta Maring at (baytam@u.washington.edu), 206-543-5190.

To participate, please click the "Next" button below.

Section 1: Information About You and your institution

1. Which of the following best describes the institution where you teach?

- Community college
- Technical college
- Four year college/university, not research intensive
- Research intensive university (R1)
- Other: _____

2. Which of the following best describes your current position within your institution?

- Tenured faculty
- Tenure-track faculty
- Non-tenure-track faculty
- Administrative/Staff
- Other: _____

3. Which of the following types of courses in Software Engineering are offered at your institution [select all that apply]?

- A one-term class specifically for non-majors
- A sequence of courses specifically for non-majors
- A one-term class designed only for majors
- A sequence of courses specifically for majors
- A one-term class taken by both majors and non-majors
- A sequence of courses taken by both majors and non-majors
- Other: _____

4. In which degree programs (if any) is the Software Engineering course(s) required?

5. In a typical year, how many courses do you teach? [branching]

- None
- One
- Two or three
- Three to five
- More than five

6. In a typical year, how many software engineering courses do you teach?

- One
- Two or three
- Three to five
- More than five

7. How many years have you been teaching at the college level?

8. How many years have you been teaching software engineering at the college level?

9. Would you say there are any institutional restrictions on the types of changes you can make to the course that you will be investigating during the Disciplinary Commons? [branching]

- Yes
- No
- Kind Of

9a. If “yes” or “kind of,” please describe

Section 2: Community of Practice

10. How often do you discuss teaching with the following individuals?

	Never	Once a year or less	Approx. once per term	A few times during each term	Many times during each term
Other instructors in your department	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other instructors at your institution outside your department	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your department chair	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Staff at your institution who specialize in faculty development (e.g., at a center for teaching and learning)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Instructors who teach similar courses as you at other institutions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Instructors who do not teach similar courses at other institutions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Graduate students or post-doctoral researchers you work with	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. Please indicate how much you agree or disagree with the following statements.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I feel connected to a network of colleagues in my geographic region who are interested in issues of teaching and learning	1	2	3	4	5
I feel connected to a network of colleagues outside my geographic region who are interested in issues of teaching and learning	1	2	3	4	5
I feel that I have adequate opportunities to discuss issues of teaching and learning in general with my colleagues	1	2	3	4	5
I feel that I have adequate opportunities to discuss issues of teaching and learning in the discipline with my colleagues	1	2	3	4	5

12. How many times in a typical academic year did you observe other instructors' teaching?

- None [to 13]
- Once or twice
- Three to five times
- More than five times

12a. For what purpose(s) did you observe other instructors' teaching?

13. How many times during a typical academic year is your teaching observed?

- None [to 14]
- Once or twice
- Three to five times
- More than five times

13a. For what purpose(s) has your teaching been observed?

Section 3: Reflections on Teaching Practices

14. How often do you:

	Never	Once a year or less	Approx. once per term	Several times during each term	Many times during each term
Reflect on your teaching practices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Document your reflections on your teaching (e.g., journal, teaching portfolio)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Read scholarly work on teaching in the discipline	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Attend workshops or conferences with a focus on computing education	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Consult with a faculty development office or staff member on campus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Try a new teaching practice based on reflection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Try a new teaching practice based on student feedback	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Try a new teaching practice based on scholarly work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Conduct an informal study to assess the impact of changes to your teaching	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Employ a method of assessment beyond standard course evaluations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

15. Have you published and/or presented scholarly work on computing education?

- Yes
- No
- In preparation

16. Approximately what percentage of your professional work is spent doing scholarly work (e.g., conducting studies, writing papers, giving professional presentations) on computing education?

- None
- Less than 5%
- 6 – 10%
- 11 – 20%
- 21 – 30%
- 31 – 40%
- 41 – 50%
- More than 50%

Section 4: Portfolios

The next set of questions focuses on the distinction between a *course* portfolio and a *teaching* portfolio and your experience with each.

17. Please indicate how much you agree or disagree with the following statements.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I understand the difference between a teaching portfolio and a course portfolio	1	2	3	4	5
I can clearly articulate my teaching philosophy	1	2	3	4	5
I can provide concrete examples to illustrate my teaching philosophy	1	2	3	4	5

18. Have you ever constructed a *teaching* portfolio? [branching]

- Yes [to 18a]
- No [to 18d]
- Partial [to 18a]

18a. For what purpose(s) did you construct a teaching portfolio, or part of one (please select all that apply)?

- Job application
- Requirement for promotion/tenure
- Requirement for a course
- Personal enrichment
- As part of a workshop or seminar
- Other: _____

18b. Did you share your teaching portfolio (or part of it) with anyone else?

- Yes [To 18c]
- No [To 18d]

18c. With whom did you share your teaching portfolio (or part of it)? (Select all that apply)

- Other departmental instructors at your institution
- Other instructors at your institution outside of your department
- Your department chair
- Tenure & promotion committee
- Instructors at other institutions in the discipline
- Instructors at other institutions not in the discipline
- Graduate students or post-doctoral researchers you work with
- Posted it online
- Other: _____

18d. What do you believe is the primary purpose of a teaching portfolio?

18e. In general, what would you say are the benefits of sharing your teaching portfolio?

18f. Please describe any specific reservations about sharing your teaching portfolio?

19. Have you ever constructed a *course* portfolio? [branching]

- Yes [to 19a]
- No [to 19d]
- Partial [to 19a]

19a. For what purpose did you construct a course portfolio, or part of one? (Select all that apply)

- Job application
- Requirement for promotion/tenure
- Requirement for a course
- Personal enrichment
- As part of a workshop or seminar
- Other: _____

19b. Did you share your course portfolio (or part of it) with anyone else?

- Yes [To 19c]
- No [To 19d]

19c. With whom did you share your course portfolio (or part of it)? (Select all that apply)

- Other departmental instructors at your institution
- Other instructors at your institution outside of your department
- Your department chair
- Tenure & promotion committee
- Instructors at other institutions in the discipline
- Instructors at other institutions not in the discipline
- Graduate students or post-doctoral researchers you work with
- Posted it online
- Other: _____

19d. What do you believe is the primary purpose of a course portfolio?

19e. In general, what would you say are the benefits of sharing your course portfolio?

19f. Please describe any specific reservations you have about sharing your course portfolio?

Section 5: Disciplinary Commons

20. Do you know of any *Disciplinary Commons* participants from previous experience?

- Yes [to 20a]
- No [to 21]

20a. Briefly describe how you know these other participants.

21. How did you hear about the *Disciplinary Commons*?

22. What aspects or qualities (if any) of the *Disciplinary Commons* do you think will be the most valuable to you?

23. What aspects or qualities (if any) of the *Disciplinary Commons* do you think will be less valuable to you?

24. Additional comments?

U.S. POST-SURVEY

Survey Pre-Amble

The University of Washington's Office of Educational Assessment (OEA) has been contracted to conduct an evaluation of *Disciplinary Commons* for the purpose of assessing program outcomes and informing program improvement. As a participant in this program, we are asking you to complete the following survey to provide your reflections on the experience and provide data OEA can compare to information you provided at the beginning of the program.

The survey should take approximately 10 to 15 minutes to complete. Your responses will remain confidential; the information you provide will be linked to a code number assigned to you automatically by the UW WebQ system. In a separate list, your email address will be linked to your code number. The purpose of maintaining a link to the code numbers is to match up your responses with responses you provided at the beginning of the program and possibly at points later in the future. Only OEA evaluation staff will have access to the code list.

The information you provide will be summarized in a report for the co-PIs of the *Disciplinary Commons* grant. The data will be presented in an aggregated fashion and no identifying information will be included in the report. Your participation is voluntary; you may skip any question you do not wish to answer.

If you have any questions about this survey or how the information will be used, please contact Bayta Maring at (baytam@u.washington.edu), 206-543-5190.

To participate, please click the "Next" button below.

Section 1: Your Participation & Portfolio

1. Approximately how many *Disciplinary Commons* sessions did you attend?

- Never missed any
- Missed one
- Missed two
- Missed three to five
- Missed more than five

2. Approximately what proportion of monthly “homework” assignments did you complete?

- Never missed any
- Missed one
- Missed two
- Missed three to five
- Missed more than five

3. During the year in which you participated in the Disciplinary Commons, how often did you write reflective comments related to your course or your teaching that are private (i.e. only for yourself)?

- Approximately once a week or more
- Every few weeks
- Approximately once a month
- Several times but not systematically
- Once or twice
- Never

4. At this point, what would you say is the status of your course portfolio?

- It is complete
- All of the components are complete, but the portfolio needs some revisions and/or refinement
- Most of the components are complete, but not all
- Only a few of the components are complete
- Other: _____

5. How, if at all, do you think you will use your course portfolio in the future?

6. Other than putting your portfolio online, do you plan to share your course portfolio (or part of it) with anyone else outside of your *Disciplinary Commons* cohort?

- Yes [to 7a]
- No [to 7b]

6a. With whom do you plan on sharing your course portfolio (public version) [Select all that apply]?

- Other instructors at your institution in your department
- Other instructors at your institution outside of your department
- Your department chair
- Instructors at other institutions in the discipline
- Instructors at other institutions not in the discipline
- Graduate students or post-doctoral researchers you work with
- At a regional conference
- At a national conference
- In a journal publication
- Other: _____

6b At this point, what do you believe is the primary purpose of a course portfolio?

6c. In general, what would you say are the benefits, if any, of generating a course portfolio?

6d. Please describe any reservations you have about sharing your course portfolio publicly?

Section 2: Your Disciplinary Commons Experience

7. Please indicate how much you agree or disagree with the following statements.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
At this point, I understand the difference between a teaching portfolio and a course portfolio	1	2	3	4	5
I can clearly articulate my teaching philosophy	1	2	3	4	5
I can provide concrete examples to illustrate my teaching philosophy	1	2	3	4	5

8. During your Disciplinary Commons experience did you . . .

	No, not at all	Not really, or only sort of	Yes, somewhat	Yes, definitely
. . . come to better understand your teaching philosophy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
. . . see new connections between your teaching philosophy and teaching practices?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
. . . connect concepts from one monthly <i>Commons</i> session to concepts from previous monthly <i>Commons</i> sessions?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
. . . gain new ideas for teaching practices from other <i>Disciplinary Commons</i> participants?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
. . . adopt practices from other <i>Disciplinary Commons</i> participants?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
. . . change your teaching practices during the year?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
. . . make plans to change your teaching practices the next time you teach this course?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
. . . make changes to software engineering courses beyond the one addressed in your portfolio?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
. . . develop ideas for changing software engineering courses beyond the one addressed in your portfolio?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. Please indicate how often you will engage in the following activities in the coming academic year.

	Not at all	Once during the year	Approx. once per term	Several times during each term	Many times during each term
Reflect on my teaching practices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Document my reflections on my teaching (e.g., journal, teaching portfolio)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Read scholarly work on teaching in the discipline	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Attend workshops or conferences with a focus on computing education	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Consult with a faculty development office or staff member on campus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Try a new teaching practice based on reflection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Try a new teaching practice based on student feedback	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Try a new teaching practice based on scholarly work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Conduct an informal study to assess the impact of changes to my teaching practices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Employ a method of assessment beyond standard course evaluations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. Please indicate how much you agree or disagree with the following statements about the effect of participating in *Disciplinary Commons*

AS A RESULT OF MY *DISCIPLINARY COMMONS* EXPERIENCE ...

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
...I have a clearer understanding of the learning objectives for the course that I investigated.	1	2	3	4	5
...I have a better understanding of why I teach this course the way that I do.	1	2	3	4	5
... the course that I investigated has better alignment between the learning objectives, the teaching and learning activities, and the learning assessments.	1	2	3	4	5
.... I now have a better understanding of what "good teaching" is.	1	2	3	4	5
... I am better able to provide feedback to colleagues on their teaching and course materials.	1	2	3	4	5

11. What, if anything, would you say was the most important insight you gained during your *Disciplinary Commons* experience?

11a. Following up on Question 11, how did this insight come about? What led you to this new knowledge?

Section 3: Community of Practice

12. Please rate the value of different aspects of interactions with your *Disciplinary Commons* peers (if you don't have experience with that particular type of interaction, select "N/A").

	N/A	Not at all valuable			Extremely valuable
Peer review of course portfolio content	<input type="checkbox"/>	1	2	3	4
Plenary discussions	<input type="checkbox"/>	1	2	3	4
Structured activities/exercises	<input type="checkbox"/>	1	2	3	4
Informal interactions in small groups	<input type="checkbox"/>	1	2	3	4
Peer observation of teaching	<input type="checkbox"/>	1	2	3	4
Email exchanges	<input type="checkbox"/>	1	2	3	4

13. Please indicate how much you agree or disagree with the following statements about your interactions with other *Disciplinary Commons* participants.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
In general, participants were willing to share their own perspectives even if they differed from each other	1	2	3	4	5
During the year, I learned about other participants' perspectives.	1	2	3	4	5
I felt comfortable expressing my perspective in <i>Disciplinary Commons</i> sessions.	1	2	3	4	5
At times, I held back my own opinion to avoid conflict.	1	2	3	4	5
I believe the feedback I received in peer review of portfolio content was honest	1	2	3	4	5
Occasionally, the feedback I provided on portfolio content was not as incisive as it could have been because I did not want to be too harsh.	1	2	3	4	5
I plan on staying in touch with my <i>Disciplinary Commons</i> cohort	1	2	3	4	5

14. Please describe any important connections you made between other participants' insight, perspective, or experiences and your own teaching practices.

15. For what purpose, if any, might you contact members of your Disciplinary Commons cohort in the future?

Section 4: Evaluation

16. Please indicate how much you agree with the following statements about your *Disciplinary Commons* experience.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
As a whole, I enjoyed my <i>Disciplinary Commons</i> experience.	1	2	3	4	5
I think my decision to take part in the <i>Disciplinary Commons</i> was a good one.	1	2	3	4	5
Being a part of the <i>Disciplinary Commons</i> was a positive addition to my CV.	1	2	3	4	5
The reflections on my teaching that I did as a <i>Disciplinary Commons</i> participant was well-integrated into my career goals.	1	2	3	4	5
I believe that my participation in the <i>Disciplinary Commons</i> advanced my career.	1	2	3	4	5
At this point, I consider participation in the <i>Disciplinary Commons</i> a good use of my time.	1	2	3	4	5
During the <i>Disciplinary Commons</i> , I learned more about how to assess student learning than I had known before.	1	2	3	4	5

17. Please rate the following aspects of Disciplinary Commons?

	Poor	Average	Good	Very Good	Excellent
Level of organization:	1	2	3	4	5
Coherence across sessions:	1	2	3	4	5
Logical sequence of sessions	1	2	3	4	5
Relevance of assignments to sessions	1	2	3	4	5
Appropriateness of assignments	1	2	3	4	5
Relevance of readings to sessions	1	2	3	4	5
Appropriateness of readings	1	2	3	4	5
Overall structure of the program	1	2	3	4	5
Online materials	1	2	3	4	5
The facilitator's contribution to the <i>Disciplinary Commons</i>	1	2	3	4	5
Use of session time	1	2	3	4	5
Facilitator's effectiveness in guiding discussions during <i>Disciplinary Commons</i> sessions.	1	2	3	4	5
<i>Disciplinary Commons</i> overall.	1	2	3	4	5

18. What aspects or qualities (if any) of the *Disciplinary Commons* did you find most valuable?

19. What aspects or qualities (if any) of the *Disciplinary Commons* did you find least valuable?

20. How, if at all, could the *Disciplinary Commons* program be improved?

21. Please provide any comments and/or constructive feedback specifically for the *Disciplinary Commons* facilitator.

22. Additional comments

ADOPTER PRE-INTERVIEW PROTOCOL

Pre-amble:

As the evaluator on this project, I am gathering some information from the facilitators of the current Disciplinary Commons to understand more about the process of adopting and adapting these materials. The information you provide will be used to support a more widespread dissemination of the Disciplinary Commons and help future adopters of the program, so the primary purpose of this interview is to document your experience so far and make note of things that could make the experience of adopting this program better or easier for future facilitators.

I have a series of questions for you and I will just be taking type-written notes (I will not be audio-recording). I will summarize your interview in a brief report given to Josh and Sally and so, obviously, you will be identifiable in the report. As we are talking, if there are things you might be hesitant to say, for whatever reason, we can talk about how to include that in a report. I will send the report to you for review before sending it to Josh and Sally, and you can make any edits you feel are appropriate.

Any questions for me before we get started?

1. Motivation

- How did you hear about Disciplinary Commons?
- What motivated you to conduct your own Disciplinary Commons?
- When deciding whether to conduct your own Disciplinary Commons, how did you learn more about the project and your role?
- Any information you wish you had when making that decision?

2. Recruitment

- Can you tell me a little about the process you used to recruit your current set of Disciplinary Commons participants?
- How would you characterize the demand among your colleagues for a program like this?
- Any recruitment techniques that seemed to work well? What do you think motivated your participants to commit to this program?
- Any challenges you encountered during recruitment? What about concerns that potential participants expressed?
- Is there any support that would have helped make recruitment more effective or easier for you?

3. Preparation

- Before the Disciplinary Commons began, what kind of course preparation did you do?
- How much time would you say you invested before starting the first session?
- Anything that would have helped you as you were preparing for the Disciplinary Commons?
- How about on a session-to-session basis – what kind of preparation do you do?
- Approximately how much time is required to prepare each session?
- Anything that would help you prepare for each session?

4. How is it going?

- In general, how is it going so far?
- At this point, how would you describe your role in the Disciplinary Commons?
- Have you had opportunity to reflect on how it's going, on your own? What about with others?
- Have you received any feedback from participants on how it is going or how it might be improved? Do you have any mechanisms for gathering this type of feedback?
- What, if anything, would you say has been most rewarding so far?
- Any challenges you experiences so far? Any lessons learned?
- Have you made any changes in the materials so far? What led you to make these changes?
- Anything that could have improved the process for you? Any support or assistance you would have liked or that would have helped?

5. Looking ahead

- Looking ahead, what are you most looking forward to in the remaining Disciplinary Commons sessions?
- Any challenges you anticipate in the coming sessions?
- Anything you think you might need coming up?
- Looking further ahead, to what extent do you think any of your participants will become more involved in scholarly work on teaching and learning (e.g., attending conferences, publishing)?
- Any potential future facilitators among your participants?

6. Any additional comments about Disciplinary Commons?

ADOPTER POST-INTERVIEW PROTOCOL

Pre-amble:

Thanks very much for taking the time to take part in this interview. At this point, I am helping Josh gather some updated information about how your Disciplinary Commons session went, and any lessons learned from the process of adopting and adapting these materials. The information you provide will be used to support a more widespread dissemination of the Disciplinary Commons and help future adopters of the program, so the primary purpose of this interview is to document your experience so far and make note of things that could make the experience of adopting this program better or easier for future facilitators.

I have a series of questions for you and I will just be taking type-written notes (I will not be audio-recording). I will summarize this interview **in combination with your previous interview** in a brief report given to Josh and Sally and so, obviously, you will be identifiable in the report. As we are talking, if there are things you might be hesitant to say, for whatever reason, we can talk about how to include that in a report. I will send the report to you for review before sending it to Josh and Sally, and you can make any edits you feel are appropriate.

Any questions for me before we get started?

1. How did it go?

- In general, how did it go?
- Have you had opportunity to reflect on the experience on your own? What about with others?
- Did you receive any feedback from participants on how it went or how it might be improved? If so, how did you collect this information (formally or informally)?
- What, if anything, was most rewarding about the experience overall?
- Any challenges you experienced? Any lessons learned?
- Anything that could have improved the process for you? Any support or assistance you would have liked or that would have helped?

2. Outcomes

- How was the retention in the sessions? What proportion of participants stayed in through the end?
- How successful were participants in completing their course portfolios? Did they all have some kind of deliverable at the end or not?
- In general, what would you say was the most valuable part of Disciplinary Commons for participants?
- How would you characterize the quality of the discussions during you Disciplinary Commons sessions? Any specific conversations that stand out in your memory as particularly fruitful or valuable?
- From your perspective, how effective was the Disciplinary Commons in encouraging your participants to reflect actively on their teaching practices? Does any specific evidence of this reflection come to mind?
- To what extent did participants share teaching practices during Disciplinary Commons discussions? Any specific examples?
- During the course of the Disciplinary Commons sessions, to what extent did you observe the formation and ongoing development of a community among the participants? Any examples of participants communicating above and beyond what was strictly required?

3. Looking ahead

- If given the opportunity, would you facilitate another Disciplinary Commons sessions? What factors would make it more likely for you to facilitate again?
- Looking ahead, do you think you will stay in touch with these participants? If yes, how so (in what forums/contexts)? Do you think they will stay in touch with each other (regardless of your involvement)?
- Looking further ahead, to what extent do you think any of your participants will become more involved in scholarly work on teaching and learning (e.g., attending conferences, publishing)?
- Any potential future facilitators among your participants?

4. Any additional comments about Disciplinary Commons?

APPENDIX B: DETAILED FINDINGS, PRE- AND POST-SURVEYS

This appendix provided detailed, descriptive findings from all pre- and post-survey items. For a higher-level summary of the primary findings, please see the main report

I. Pre-Survey Only

Some questions, mostly about participants' background were only asked on the pre-survey. Results from these items are presented below.

Section 1: Information About You and Your Institution

U.S. Disciplinary Commons participants were asked to indicate which of four options best describes the institution where they teach. Over one-half of participants (4, 57.1%) indicated that they teach at a four year college/university that is not research intensive and two participants (28.6%) reported that they teach at a research intensive university (R1). One participant chose "other," indicating that she/he teaches at a Bachelor and Master's granting institution.

Next, U.S. participants were asked to indicate which of four options best describes their current position within their institution. Just over one-half of participants (4, 57.1%) reported that they are tenured faculty and two (28.6%) reported that they are tenure-track faculty. One participant said that she/he was non-tenure track faculty.

U.S. participants were asked to choose from a list of six types of courses in Software Engineering that are offered at their institution. Nearly all participants (6, 85.7%) reported that a sequence of Software Engineering courses specifically for majors is offered at their institution. One participant reported that a sequence of Software Engineering courses for majors and non-majors is offered at their institution and two participants chose "other." One said, "We have a Software Engineering major" and the other said, "Full Software Engineering BSSE."

Both U.S. and U.K. participants were asked the following question: "In which degree programs (if any) is the Software Engineering course(s)/Database module(s) required?" U.S. participants most commonly mentioned Computer Science degree programs whereas U.K. participants were more likely to note Computing degree programs. It is also important to note that U.K. participants indicated a much wider variety of degree programs as compared with those listed by U.S. participants. See Tables B1 and B2 for a summary of U.S. and U.K. responses.

Table B1. In which degree programs (if any) is the Software Engineering course(s) required?

U.S. Degree Programs	Frequency/% ⁴
Computer Science	5 (71.4%)
B.S. in Computer Science	2 (28.6)
Software Engineering	2 (28.6)
M.S. in Computer Science	1 (14.3)
Ph.D. in Computer Science	1 (14.3)
Computer Information Systems	1 (14.3)

⁴ For both U.S. and U.K. responses, since participants offered more than one response, percentages will not sum to 100%.

Table B2. In which degree programs (if any) is the Database module(s) required?

U.K. Degree Programs	Frequency (%)	U.K. Degree Programs	Frequency (%)
Computing	4 (33.3%)	BSc Computing	1 (8.3)
BSc (Hons) Computing Science	2 (16.7)	BSc Networking and Systems Support	1 (8.3)
MSc Bioinformatics	2 (16.7)	Business Computing	1 (8.3)
MSc IT	2 (16.7)	Business Information Technology	1 (8.3)
Software Engineering	2 (16.7)	Computer Science	1 (8.3)
Artificial Intelligence	1 (8.3)	Foundation Degree in Business Computing	1 (8.3)
BIT and Networking	1 (8.3)	Information Communication Technology	1 (8.3)
BSc (Hons) Computer Science	1 (8.3)	Information Systems	1 (8.3)
BSc (Hons) Computing and Networks	1 (8.3)	Information Technology	1 (8.3)
BSc (Hons) Ethical Hacking and Countermeasures	1 (8.3)	Masters Computing Science	1 (8.3)
BSc (Hons) IT Management	1 (8.3)	Multimedia Computing	1 (8.3)
BSc (Hons) Web Design and Development	1 (8.3)	Web Design and Internet Technology	1 (8.3)
BSc Computer Games	1 (8.3)	Web Development	1 (8.3)
BSc Computer Science	1 (8.3)		

All participants were asked, “In a typical year, how many courses/modules do you teach?” As shown in Figure B1, U.S. participants were equally likely to report that they taught three to five courses or more than five courses per year (3, 42.9%, respectively). U.K. participants were most likely to report that they taught three to five modules per year (5, 41.7%) but, in contrast with U.S. participants, they were more likely to report teaching two or three modules per year (See Figure B1).

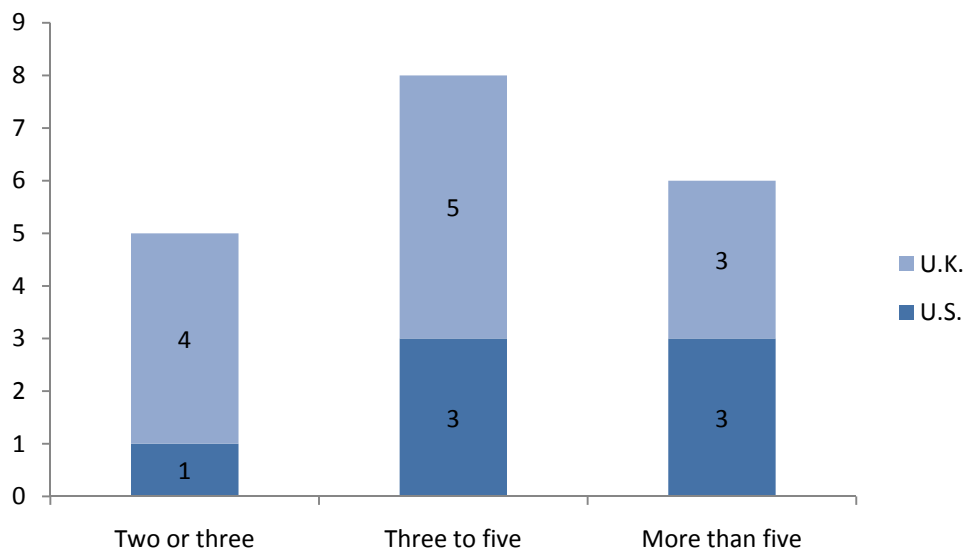


Figure B1. In a typical year, how many courses/modules do you teach?

When asked how many software engineering courses/ database modules they teach in a typical year, both U.S. and U.K. participants were most likely to indicate that they taught two or three courses/modules. However, compared with U.K. participants, U.S. participants were more likely to report that they taught more than five courses/modules (2, 28.6% v. 0%). See Figure B2.

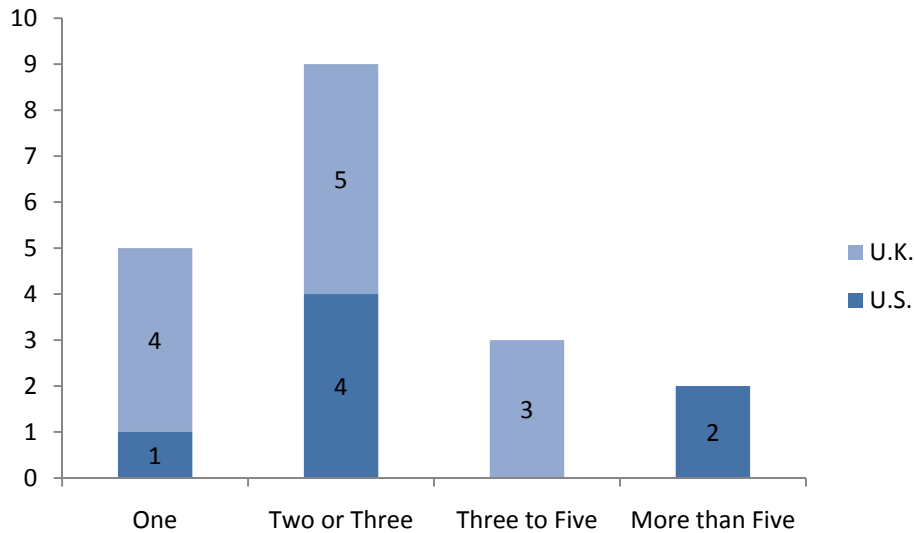


Figure B2. In a typical year, how many software engineering courses/database modules do you teach?

U.S. participants reported that they had been teaching at the college level between zero (new hire) and 20 years with an average of nine years and a median of seven years. In comparison, U.K. participants indicated that they had been teaching at the tertiary level between eight and 35 years with an average of 16 years and a median of 13 years.

When asked specifically how long they had been teaching software engineering at the college level, U.S. participants reported between zero (new hire) and 18 years with an average of eight years and a median of seven years. When asked how long they had been teaching databases at the tertiary level, U.K. participants reported between three and 20 years with an average of 12 years and a median of 10 years.

As illustrated in Figure B3, when asked whether there were any institutional restrictions on the types of changes they can make to the course/module they are investigating during the Disciplinary Commons, U.S. and U.K. participants exhibited a similar pattern of responses with around one-half stating, “No.” One-quarter of U.K. participants said that there were restrictions as compared with only 14.3% of U.S. participants.

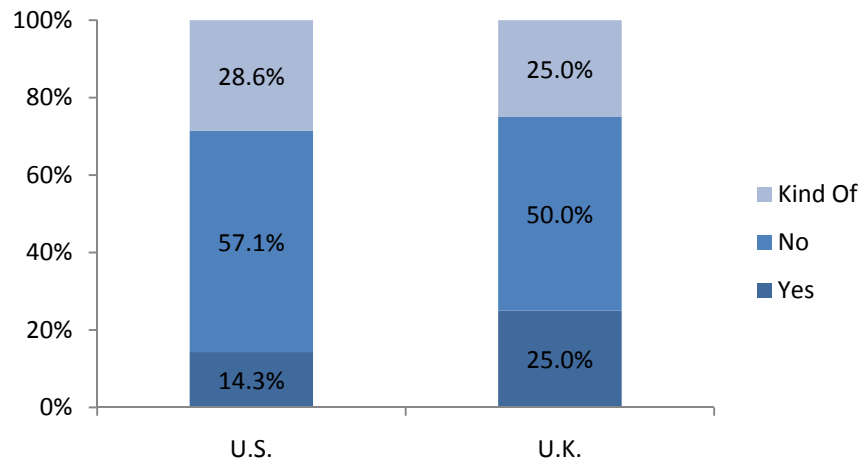


Figure B3. Would you say there are any institutional restrictions on the types of changes you can make to the module/course that you will be investigating during the Disciplinary Commons?

Those participants who chose “yes” or “kind of” were asked to elaborate on their answers in an open-ended question and all nine participants (3 U.S. and 6 U.K.) offered a response. See Table B3 for a list of all responses verbatim.

Table B3. Describe the institutional restrictions on the types of changes you can make to the module/course that you will be investigating during the Disciplinary Commons.

Disciplinary Commons	Please describe institutional restrictions
U.S.	We have a comprehensive set of program and learning objectives (and subsequent outcomes) that are somewhat difficult to transition.
U.S.	Course provides assessment material for ABET accreditation. Changes must continue to provide coverage of specific, assessed, areas.
U.S.	Need to go through via the curriculum committee and graduate affairs (in certain issues).
U.K.	DB programming must be with Python, but must also cover JDBC. Databases are required for project work in another module in Semester 2.
U.K.	On the one hand academic staff are free to determine the content and delivery approach of modules (within resourcing and validation boundaries), at the same time this module is the 2nd component in a coherent theme of three database modules delivered within our computing programmes and needs to take into what has been taught during the first and the learning outcomes required in order to facilitate the third level. Content is therefore agreed with module leaders for other database units.
U.K.	I need to teach within the syllabus. It would be possible to extend the syllabus but this would formally need committee approval. The methods I use are not prescribed.
U.K.	The module cannot be changed without requesting the changes officially. A "module description" form holds the key information, and any changes to it are submitted to a panel. Typical decision cycles for minor changes are 6 months; the decision process for major changes is whimsical.
U.K.	Assessment schedules have to fit in with the academic calendar. Assessment types etc. are fixed in the module descriptor and cannot be changed after approval in April each year. Any year-on-year changes deemed to be "major" need to be flagged up by October of the session before and usually require a formal programme approval event and lots of documentation. Teaching methods are constrained to some extent by the university's teaching and learning plan and its local implementation within the school.
U.K.	Modules must adhere to learning outcomes of the programme, must adhere to assessment strategy, etc.

Section 2: Community of Practice

Table B4 shows all participants' (i.e., U.S. and U.K. Commons participants) responses to how often they discuss teaching with seven different groups of people. Participants were most likely to indicate that they discussed teaching with other instructors in their department (on a scale from 1 "Never" to 5 "Many times during each term," \underline{M} = 4.68) followed by graduate students or post-doctoral researchers (\underline{M} = 3.16).

Table B4. How often do you discuss teaching with the following individuals?

	Never	Once a year or less	Approx. once per term	A few times during each term	Many times during each term	Mean	SD	n _{Mean}
	1	2	3	4	5			
Other instructors in your department	0 (0.0%)	0 (0.0%)	1 (5.3%)	4 (21.1%)	14 (73.7%)	4.68	.58	19
Other instructors at your institution outside your department	3 (15.8)	3 (15.8)	5 (26.3)	6 (31.6)	2 (10.5)	3.05	1.27	19
Your department chair	2 (10.5)	6 (31.6)	3 (15.8)	4 (21.1)	4 (21.1)	3.11	1.37	19
Staff at your institution who specialize in faculty development (e.g., at a center for teaching and learning)	3 (16.7)	7 (38.9)	4 (22.2)	3 (16.7)	1 (5.6)	2.56	1.15	18
Instructors who teach similar courses as you at other institutions	3 (15.8)	6 (31.6)	2 (10.5)	6 (31.6)	2 (10.5)	2.89	1.33	19
Instructors who do not teach similar courses at other institutions	9 (47.4)	5 (26.3)	2 (10.5)	2 (10.5)	1 (5.3)	2.00	1.25	19
Graduate students or post-doctoral researchers you work with	5 (26.3)	3 (15.8)	1 (5.3)	4 (21.1)	6 (31.6)	3.16	1.67	19

As shown in Figure B4, by and large, U.S. participants reported more frequent discussions with various individuals about their teaching as compared with U.K. participants (with the exception of other instructions in their department). U.S. participants were significantly more likely to report talking about teaching with their department chair⁵ and talking with instructors who teach similar courses at other institutions.⁶

⁵ Independent samples t-test: $t(17) = 3.05, p < .01$.

⁶ Independent samples t-test: $t(12) = 2.23, p < .05$ (equal variances not assumed).

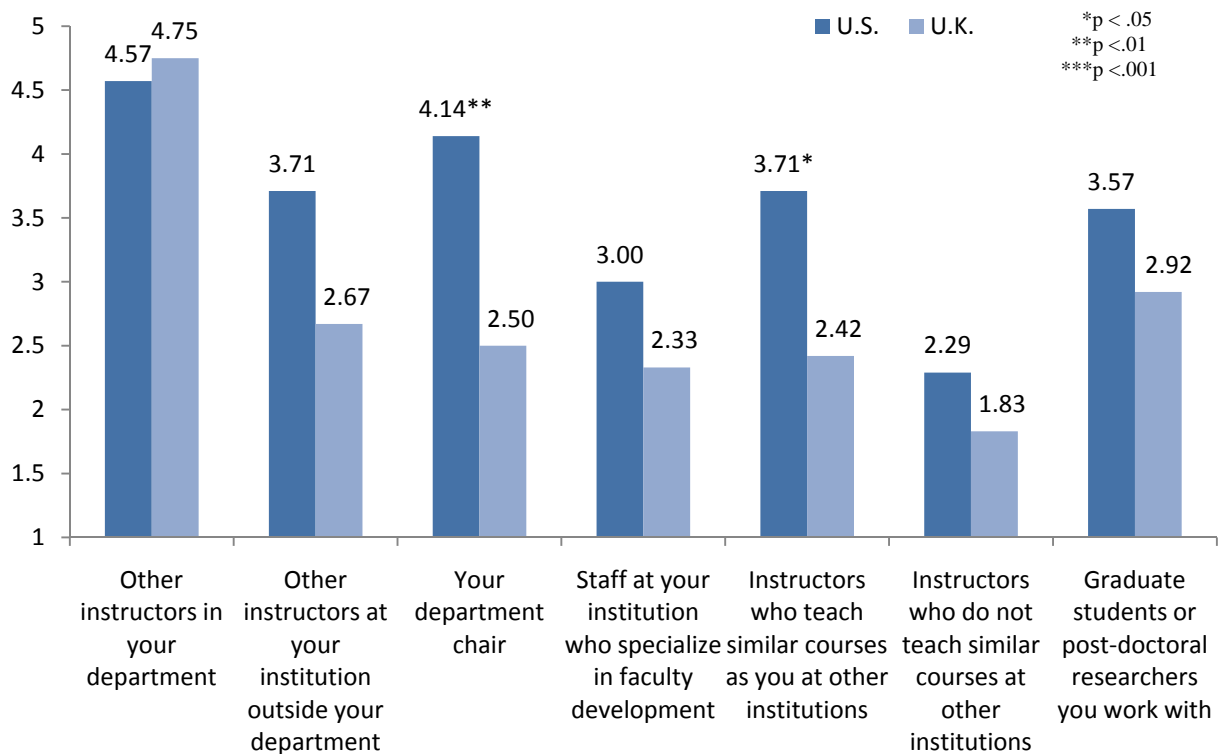


Figure B4. Comparison of U.S. and U.K. Disciplinary Commons participants' mean responses to questions about how often they discuss teaching with certain individuals

On a scale from 1 "Strongly Disagree" to 5 "Strongly Agree", Disciplinary Commons participants were most likely to agree that they have adequate opportunities to discuss issues of teaching and learning both in the discipline and in general ($M_s = 3.63$ and 3.53 , respectively). They were least likely to agree that they feel connected to a network of colleagues in their geographic region who are interested in issues of teaching and learning ($M = 2.84$). See Table B5 for all responses.

Table B5. Please indicate how much you agree or disagree with the following statements

	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5	Mean	SD	n _{Mean}
I feel connected to a network of colleagues in my geographic region who are interested in issues of teaching and learning	4 (21.1%)	3 (15.8%)	5 (26.3%)	6 (31.6%)	1 (5.3%)	2.84	1.26	19
I feel connected to a network of colleagues outside my geographic region who are interested in issues of teaching and learning	3 (15.8)	3 (15.8)	2 (10.5)	9 (47.4)	2 (10.5)	3.21	1.32	19
I feel that I have adequate opportunities to discuss issues of teaching and learning in general with my colleagues	1 (5.3)	3 (15.8)	4 (21.1)	7 (36.8)	4 (21.1)	3.53	1.17	19
I feel that I have adequate opportunities to discuss issues of teaching and learning in the discipline with my colleagues	1 (5.3)	2 (10.5)	4 (21.1)	8 (42.1)	4 (21.1)	3.63	1.12	19

As illustrated in Figure B5, U.S. participants were more likely to agree that they feel connected to a network of colleagues both in and out of their geographic regions; however, these differences were not statistically

significant. Moreover, U.S. participants were marginally more likely to agree that they have adequate opportunities to discuss issues of teaching and learning in general with their colleagues⁷. Finally, U.S. participants were significantly more likely to agree that they have adequate opportunities to discuss issues of teaching and learning in the discipline with their colleagues.⁸

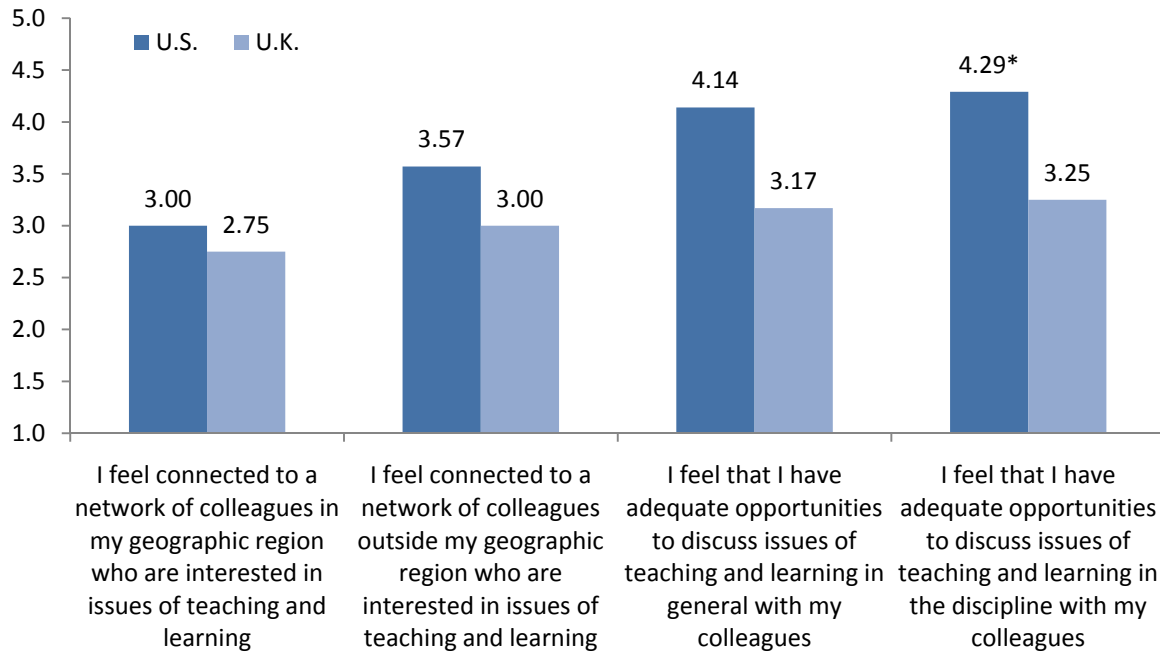


Figure B5. Comparison of U.S. and U.K. Disciplinary Commons participants' mean responses to how much they agree or disagree with a series of statements about community of practice

As shown in Figure B6, when asked how many times in the last academic year they observed other instructors teaching, participants were most likely to indicate "None" or "Once or Twice."

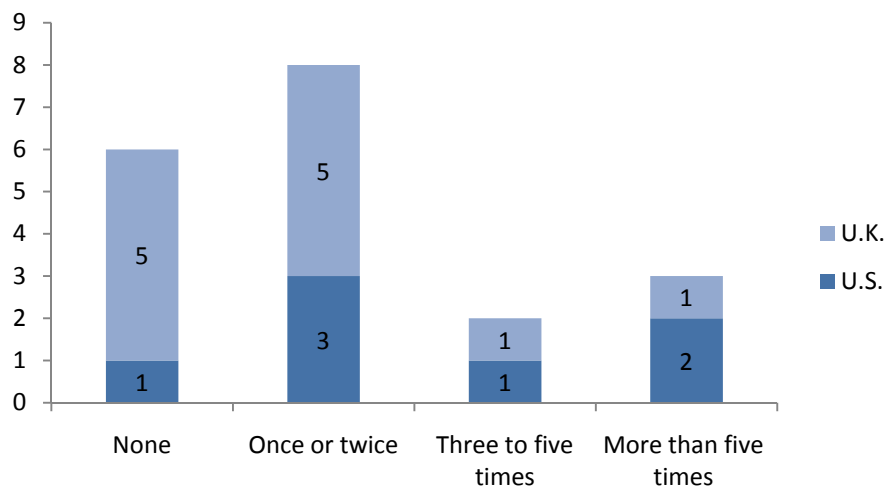


Figure B6. How many times respondents reported that they had observed other instructors' teaching in the last academic year

⁷ Independent samples t-test: $t(17) = 1.87, p = .08$.

⁸ Independent samples t-test: $t(17) = 2.14, p < .05$.

Those participants who indicated that they had observed other instructors teaching at least “Once or twice” were asked the following open-ended question: “For what purpose(s) did you observe other instructors teaching?” A total of 14 participants provided responses to this question. The majority of responses from U.K. participants (5 of 7, 85.7%) indicated an external motivation (e.g., institutional requirement). Approximately two-thirds of U.S. participants’ responses clearly indicated an external motivation. The remaining responses were deemed internally motivated. See below for all responses verbatim separated by category.

External Motivation (9)

- *Good question. There is a scheme that requires this. (UK)*
- *Institutional QA Requirement (peer-review of Learning & Teaching) (UK)*
- *Part of our duties. To disseminate good practice. (UK)*
- *I was told to as part of the Teaching and Learning Committee in house. (UK)*
- *This is a faculty requirement. This is not a particularly useful exercise. (UK)*
- *Evaluate in a peer review capacity. (US)*
- *Observe faculty member(s) seeking promotion/tenure. (US)*
- *To support their tenure application. (US)*
- *I sat in on their classes as they followed up on my class. As part of an official peer evaluation team. (US)*

Internal Motivation (4)

- *Co-teaching module with a colleague. As mentor to a teacher trainee. (UK)*
- *See how they taught a course at [my institution]. See how successful teachers teach software engineering. (US)*
- *Observe lecture delivery, student involvement, and general conduct in class. (US)*
- *Interest in the topic of instruction. Preparation for substitute teaching (US)*

Combination (1)

- *The university has a peer observation strategy which requires annual peer observation to be carried out by every lecturer. Pairings are self-selected, I usually pair up with a colleague where we are interested in each other’s teaching methods. (UK)*

As shown in Figure B7, when asked how many times in the last academic year their teaching has been observed, participants most commonly chose “once or twice,” followed by “none.”

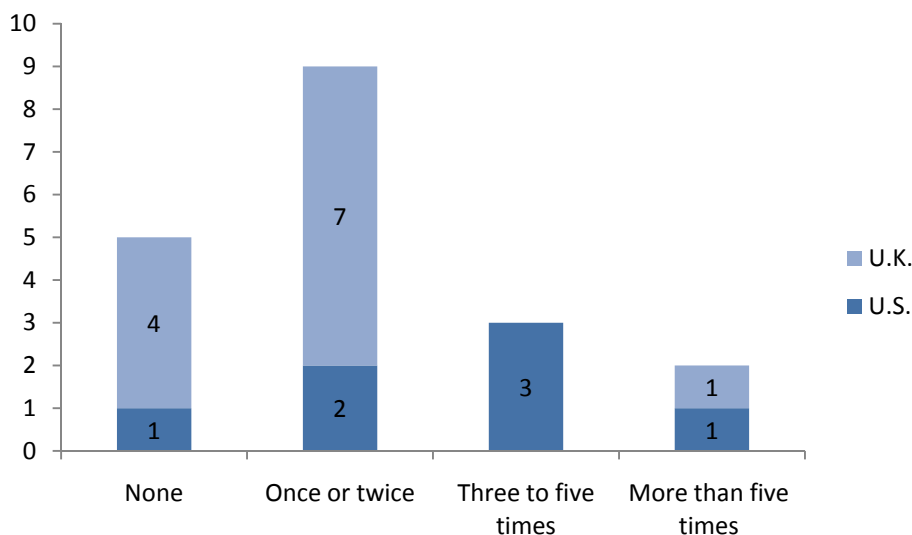


Figure B7. How many times respondents reported that their own teaching is observed during a typical academic year
 Those participants who indicated that their teaching had been observed at least “Once or twice” were asked the following open-ended question: “For what purpose(s) was your teaching observed?” A total of 14 participants provided responses with the majority (10 or 14, 71.4%) citing external motivation (e.g., faculty requirement).

Internal motivation refers to either the teacher’s desire to improve or another teacher’s desire to learn from the respondent. Responses are presented in their entirety below, separated according to categories.

External Motivation (10)

- Peer evaluation (2) (U.S.)
- New faculty observation (planned) (U.S.)
- There is a scheme (U.K.)
- Institutional QA Requirement (peer-review of learning and teaching) (UK)
- To evaluation quality of teaching. The observation is carried out by staff outside my discipline, exclusively on patterns of teaching practice (e.g., “lesson plans break the work down in items of less than 10 minutes” or “latecomers are welcomed and challenged.”) (UK)
- Being told by T & L committee (UK)
- As before- this is a faculty requirement. (UK)
- Faculty requirement. (UK)
- Observed by faculty member assigned to teach a section of the software engineering course in subsequent semester but who had never before taught the course. I have also been observed for reappointment/tenure/promotion. (US)

Internal Motivation (2)

- Interest in the topic of instruction. Preparation for substitute teaching. Acquire foundational/background knowledge for research purpose. (US)
- Co-teaching of modules with a colleague. (UK)

Combination (2)

- Oversee first teaching at Rose. Coordinate two related courses (project management and software requirements). (US)
- Part of duties, team teaching, to disseminate good practice. (UK)

Section 3: Reflections on Teaching Practices

When asked whether they had published and/or presented scholarly work on computing education, 13 participants (68.4%) said “Yes,” five participants (26.3%) said “No,” and one participant (5.3%) chose “In preparation.” Ten U.K. participants said “Yes” compared with only three U.S. participants (See Figure B8).

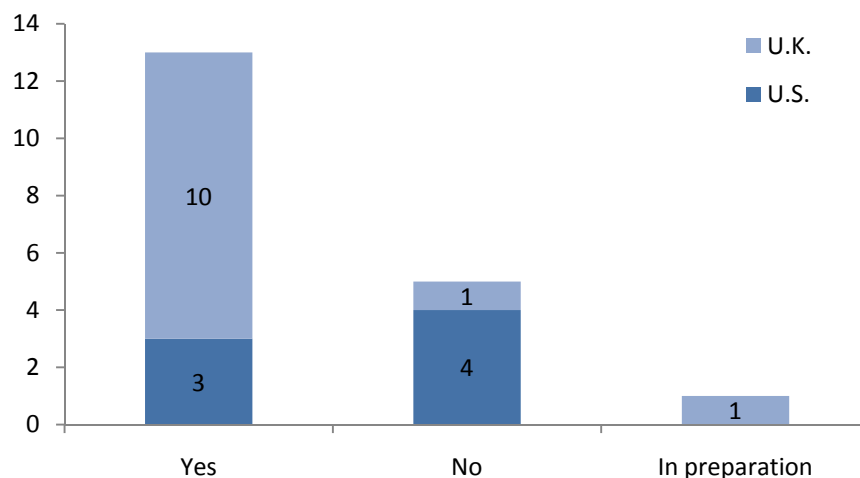


Figure B8. Participants’ responses to whether they have published and/or presented scholarly work on computing education

Next, participants were asked to indicate what percentage of their professional work is spent doing scholarly work (e.g., conducting studies, writing papers, giving professional presentations) on computing education. As shown in Figure B9, nearly all participants reported that they spent less than 10% of their professional work engaged in this area of work.

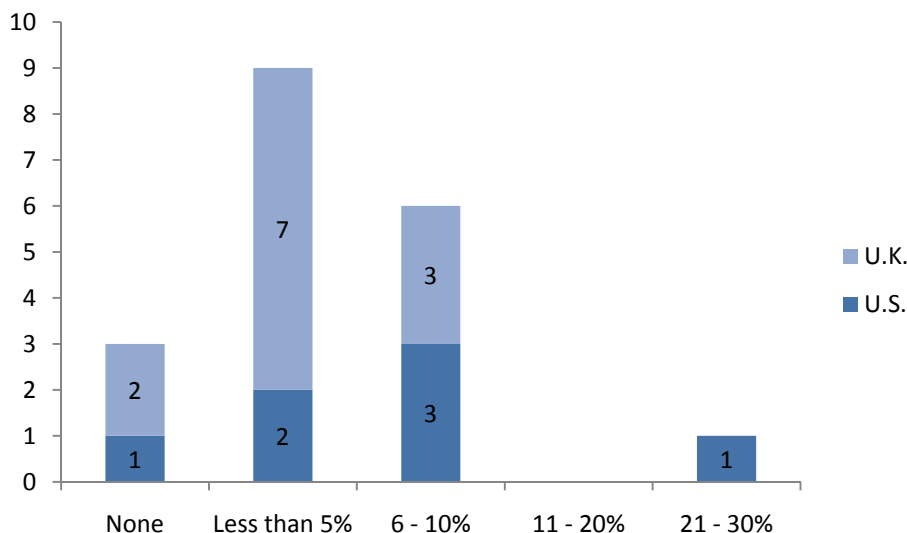


Figure B9. Participants’ responses to approximately what percentage of their professional work is spent doing scholarly work on computing education

Section 4: Portfolios

When asked whether they had ever constructed a teaching portfolio, four participants (21.1%) said “Yes,” compared with 11 participants (57.9%) who said “No.” See Figure B10 for a breakdown of U.S. and U.K. responses.

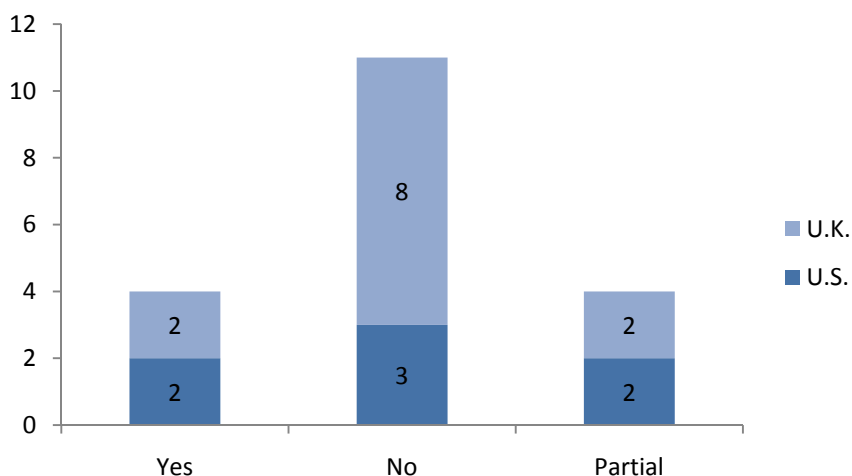


Figure B10. U.S. and U.K. participants’ responses to whether they have ever constructed a teaching portfolio

If participants indicated “Yes” they had constructed a teaching portfolio or at least a “partial” one, they were asked to select “all that apply” from a list of six reasons for completing a teaching portfolio. As illustrated in Figure B11, U.K. participants were most likely to indicate that they had constructed a teaching portfolio (or part of one) for a job application or as a requirement for promotion/tenure. In comparison, U.S. participants were

most likely to indicate that it was a requirement for a course. One U.S. and one U.K. respondent chose “Other.” The U.S. participant specified the reason as “building a SE program,” and the U.K. respondent said, “requirement for teaching qualification.”

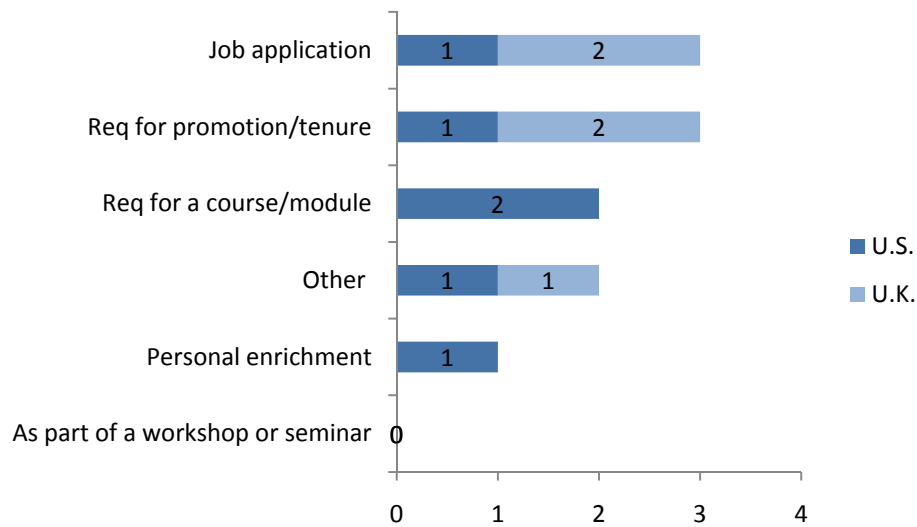


Figure B11. U.S. and U.K. participants’ responses to the following question: “For what purpose(s) did you construct a teaching portfolio, or part of one?”

All U.S. participants who indicated that they had constructed a teaching portfolio (n = 4) said that they shared their teaching portfolio (or part of it) with somebody else compared with half of U.K. participants (n = 2).

Those who indicated that they shared their teaching portfolio were asked to “select all that apply” from a list of different people with whom they might have shared their teaching portfolio with. See Figure B12 for all responses. Two participants (1 U.S. and 1 U.K.) chose “other,” with the U.S. participant stating that she/he shared with her/his “SE program faculty” and the U.K. participant stating, “my education lecturers on the “PGCE in post-compulsory education.”

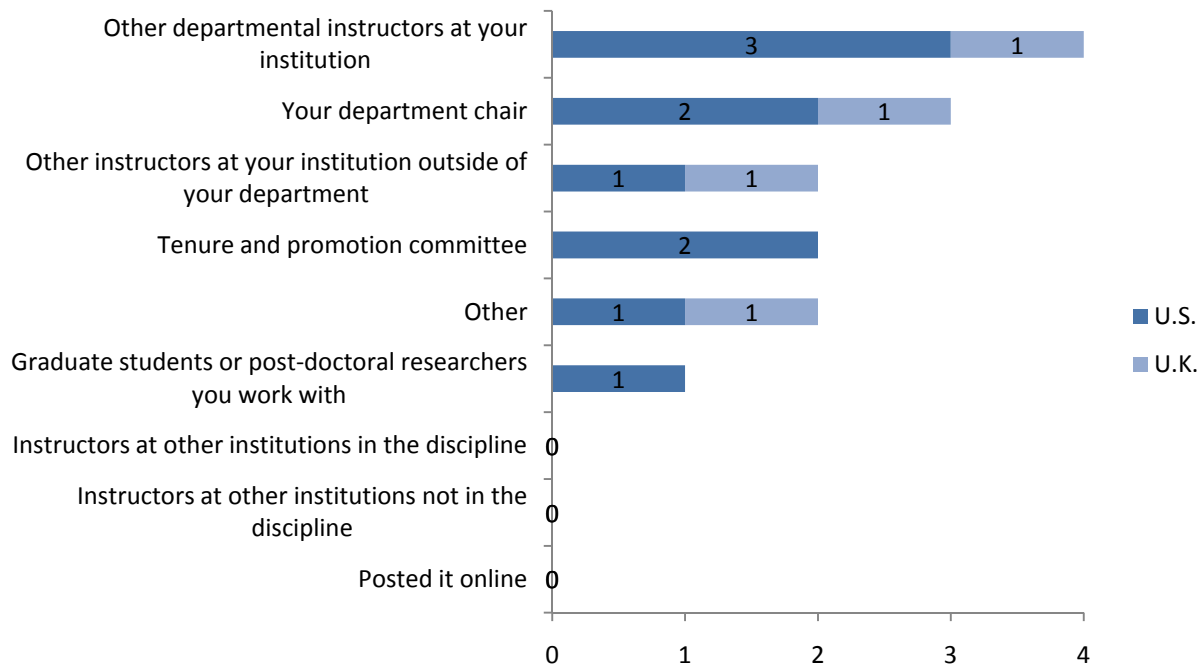


Figure B12. U.S. and U.K. participants' responses to the following question: "With whom did you share your teaching portfolio (or part of it)?"

Next, participants were asked a series of open-ended questions about the purpose of a teaching portfolio, the benefits of sharing their teaching portfolio, and whether they have any specific reservations about doing so. First, when asked what they believe is the primary purpose of a teaching portfolio, 17 participants offered a response. Participants most commonly mentioned the opportunity to reflect on and improve their teaching and, in turn, enhance students' learning. Other reasons mentioned included the opportunity to document teaching practices and have teaching evaluated for purposes of promotion. See Table B6 for all responses verbatim.

Table B6. What do you believe is the primary purpose of a teaching portfolio?

U.S. Responses
To provide a framework from which to develop and refine the courses I teach for the purpose of reflection and improvement.
The purpose of an individual's teaching portfolio is help the individual reflect on, and evaluate, his/her teaching practices and their effect on students learning. It also plays a significant role in providing evidence for personnel making decisions on reappointment/tenure/promotion.
To aid an instructor in evaluating effectiveness of teaching methodologies.
Reflection, feedback, improvement, and evaluation.
Document a methodology, goals, and philosophy for delivering, measuring and evaluation learning within a specified discipline.
To document your teach philosophy. To show evidence of your ability to teach, to show evidence of your ability to learn.
U.K. Responses
To document teaching practice.
To illustrate selected aspects of the teaching done by an individual academic.
Reflection on Teaching and Learning for the purposes of positively improving student learning experience and achieving the learning outcomes.
It is a vehicle for assembling an account of the practice of teaching in a particular module.
To assemble a picture of how I teach a module, gathering information on practice as well as actual disciplinary content or materials.
Allows both self and peer evaluation.
Reflection, evaluation and enhancement of student experience.
The sharing of information and expertise.
To help me reflect in a more structured way, and to document current practice.
Record of my T and L experiences, and how I include novel teaching strategies.
To document and reflect on practice and its evolution and to provide evidence in support of promotion or application for a new post.

Next, participants were asked about the benefits of sharing their teaching portfolio and 17 participants offered a response. Generally, participants commented on the opportunity to gain feedback from others and make improvements to their courses and teaching. Participants also commonly noted the opportunity to share ideas and gain from one another. As one participant said:

It would be useful for me to learn from the module structures of other presenters and similarly there may be approaches I use that might be useful to others.

See Table B7 for a list of all responses verbatim.

Table B7. In general, what would you say are the benefits of sharing your teaching portfolio?

U.S. Responses
Depends on with who. Perhaps with individual faculty to get feedback and improvements.
It provides evidence of an individual's teaching effectiveness and helps administrative personnel in its decision making. It can also serve to provide ideas and/or motivation to other faculty members.
To allow other instructors to gain the benefit of your lessons learned and teaching methodology evaluations.
Up-to-date record and feedback (from others).
Feedback, and learning from others.
It helps provide others with insight to good teaching practices, what to do and what not to do.
U.K. Responses
To share ideas with others, to gain an opportunity for reflection, to see how others produce a similar portfolio.
Sharing ideas / good practice.
Exchanging viewpoints and experiences.
It would be useful to me to learn from the module structures of other presenters and similarly there may be approaches I use that might be useful to others.
Two heads are better than one! Sharing the portfolio will provide views on practice that would improve it.
To give others ideas and to disseminate good practice.
Fair exchange of currency. The collective is more enhanced than any individual.
As above, sharing of information and expertise.
Learning from others - sharing good ideas - independent feedback on own practices.
To share experiences.
Feedback from peers; Share experience with younger colleagues; Document experience for staff who may take over particular modules.

Finally, participants were asked whether they had any reservations about sharing their teaching portfolios with others and 11 participants chose to offer a response. Three participants said that they had no reservations about sharing their teaching portfolios and three participants expressed concern that their work might be judged inferior to that of their colleagues. See Table B8 for a list of all responses verbatim.

Table B8. Please describe any specific reservations you have about sharing your teaching portfolio

U.S. Responses
Until it has been vetted, I'm often reluctant. Once, vetted- of course, let's share!
I cannot think of any reason I would have reservations about sharing my teaching portfolio.
No reservation.
U.K. Responses
No reservations whatsoever about sharing T and L practice, resources, etc.
I imagine that sharing the results of students evaluations collected at the end of a module may be difficult.
Only one: the worry that my work will not prove equal to my colleagues. As I work in isolation from colleagues outside my institution, there has been no opportunities like this in the past.
May reveal inadequacies in content or style, but hopefully these will be minimised by review process.
Not everyone gives.
It is important that teaching material is not taken out of context.
None- I'll have to remember to anonymise all student work, etc.
Quality of content.

Next, participants were asked an identical set of questions about a course portfolio. When asked whether they had ever constructed a course portfolio, five participants (26.3%) said “Yes,” compared with 11 participants (57.9%) who said “No.” Notably, U.S. participants were more likely to report that they had either completed a course portfolio or a partial one (6/7 participants, 85.7%) as compared with U.K. participants (2/12 participants, 16.7%). See Figure B13 for a complete breakdown of U.S. and U.K. responses.

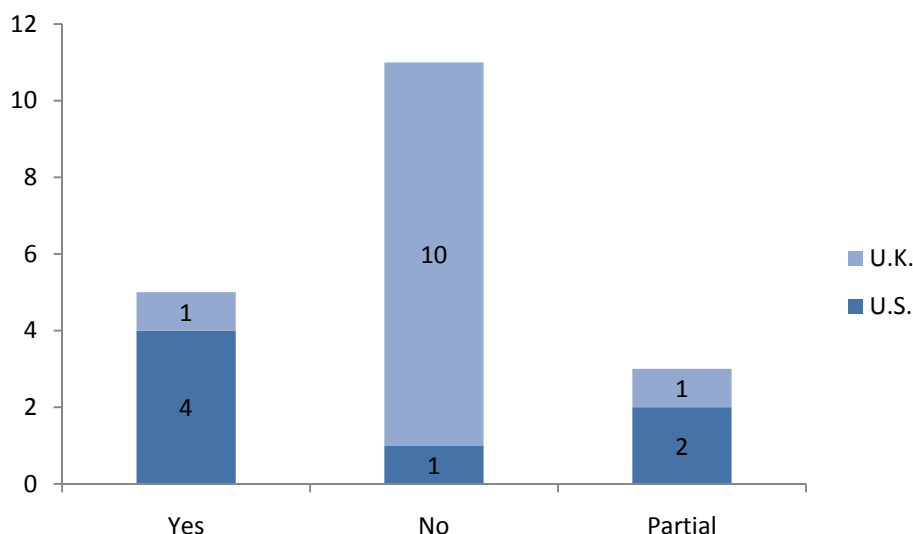


Figure B13. Participants' responses to whether they have ever constructed a course portfolio

If participants indicated “Yes” they had constructed a course portfolio or at least a “partial” one, they were asked to select “all that apply” from a list of six reasons for completing a course portfolio. As illustrated in Figure B14, participants were most likely to indicate that they constructed a course portfolio as a requirement

for a course. Two U.S. participants chose “Other,” indicating “Program Development for SE Program” and “ABET Accreditation.”

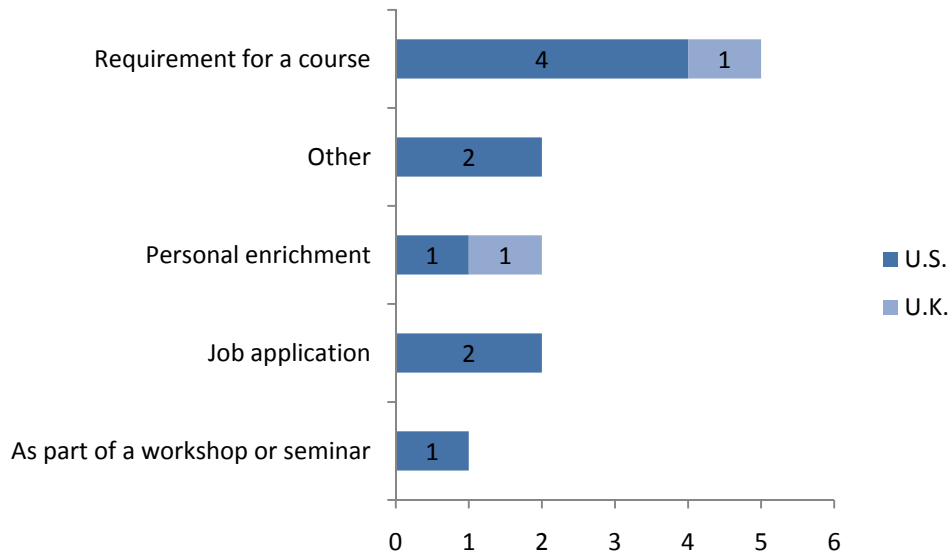


Figure B14. Participants’ responses to the following question: “For what purpose(s) did you construct a course portfolio, or part of one?”

All eight participants who indicated that they had, at the very least, constructed a “partial” course portfolio said that they had shared it with someone else.

Those eight participants were asked to “select all that apply” from a list of different people that they might have shared their course portfolio with. Participants were most likely to mention that they shared their course portfolio with other departmental instructors at their institution. Three U.S. participants chose “Other,” adding they they shared their course portfolio with “ABET committee,” “Members of the SE faculty,” and “Participants in the workshop.” See Figure B15 for a summary of all responses.

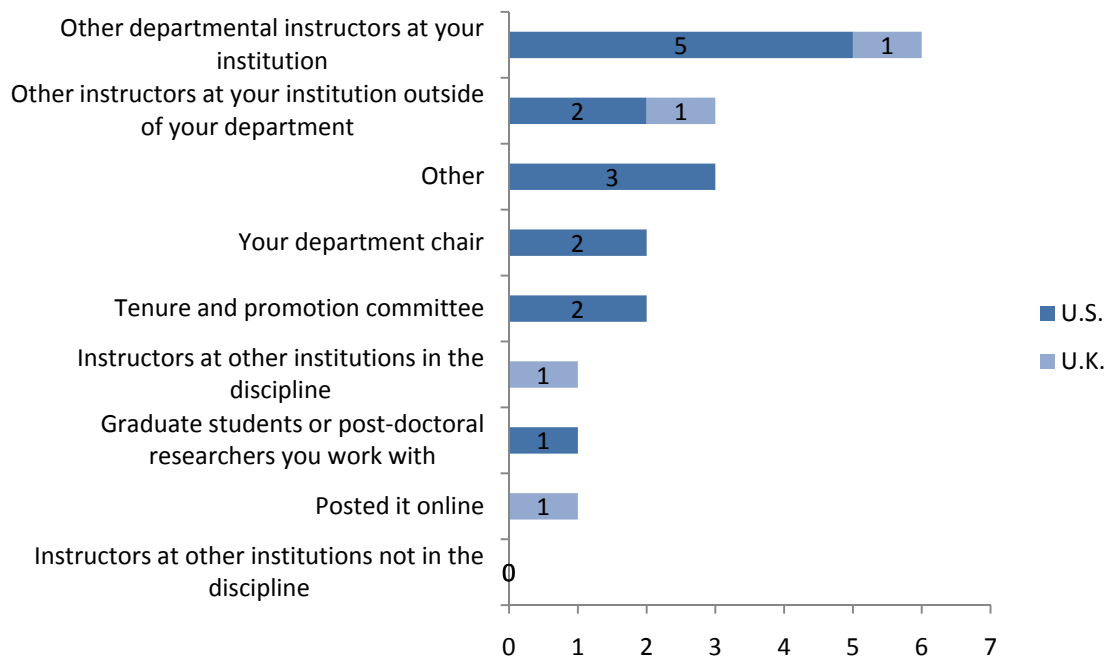


Figure B15. Participants' responses to the following question: "With whom did you share your course portfolio (or part of it)?"

Next, all participants were asked about the benefits of sharing their course portfolio and 14 participants offered a response. Participants mentioned the opportunity to document "best practices," provide future instructors with a "roadmap for course topics," and receive feedback for course improvement. See Table B9 for a list of all responses verbatim.

Table B9. In general, what would you say are the benefits of sharing your course portfolio? Pre-survey responses

U.S. Responses
Dissemination of key common elements. A roadmap for course topics to avoid redundancy. Reusable course content from which to build courses from.
It can serve the purpose of providing fellow faculty members valuable information for continuity in a course which spans several semesters. In sharing a portfolio one also allows for the possibility of getting feedback which could result in further improvement of that portfolio. It could also provide ideas for others to incorporate in their own classes/teaching.
Continuity from one instructor to the next; use of lessons-learned for a particular subject.
Feedback and learning from others towards improvement.
Documents good practices.
U.K. Responses
Documenting can reveal many things, especially gaps; promotes reflection; gives a snapshot of current practice.
Enables others (preferably those teaching a similar subject at a similar level) to provide meaningful feedback and ideas for improving my teaching.
Potential benefit to other tutors and learners of approaches that appear to work (at least) in my course context.
To share the development of the module with colleagues; to demonstrate the teaching work.
Similar to sharing a teaching portfolio.
Identifying gaps or differences in emphasis.
Sharing of knowledge and expertise.
As 15e?
Feedback from peers; Basis for reflection; Document experience for staff who may take over module.

Section 5: Disciplinary Commons

Overall, just over half of all participants (10 participants, 52.6%) reported that they knew some of the Disciplinary Commons participants from previous experience. Approximately two-thirds of U.K. participants reported that they knew some of the participants from previous experience compared whereas only 28.6% of U.S. Commons participants.

Those respondents who said that they knew participants from previous experience were asked to describe how they knew them. Respondents were most likely to indicate that those participants they knew were colleagues or they had met through SIGCSE (Special Interest Group on Computer Science Education) or at the TLAD (Teaching, Learning and Assessment of Databases) conference. See Table B10 for all responses.

Table B10. Briefly describe how you know these other participants.

U.S. Responses
Faculty in my department.
I have met some of them at SIGCSE

Table B10 (cont.). Briefly describe how you know these other participants.

U.K. Responses
One other participant on this Database Commons is a colleague. Another colleague took part in an HCI Commons project. Through participation in the TLAD conference since its inception.
Through local acquaintance and attendance at BNCOD.
I met Sally Fincher through her SIGCSE activities.
Colleague.
One participant is a colleague in my department with whom I share a lot of the teaching on a day to day basis. Others I know from TLAD as participants or from the programme committee (which I am a member of).
Know two colleagues who participated in previous disciplinary commons. Many current participants also participate in the HEA sponsored TLAD workshops which I have actively participated in.
One HCI participant is a colleague at my institution.

When asked how they heard about Disciplinary Commons, email in general and the TLAD conference/member list were mentioned most often. See Table B11 for a summary of responses.

Table B11. How did you hear about Disciplinary Commons?

How did you hear about Disciplinary Commons?	Frequency/Percentage
Email (general)	5 (26.3%)
TLAD conference/member list	5 (26.3)
Colleague	2 (10.5)
SIGCSE	2 (10.5)
Email from organizer	2 (10.5)
Personal contact with organizer	2 (10.5)
SIUE	1 (5.3)
ITiCSE 2009- Sally's presentation	1 (5.3)
Conference on teaching and learning	1 (5.3)
External examiner	1 (5.3)

Finally, participants were asked if they had any additional comments and seven participants offered a response. Five of seven comments reflected participants' gratitude for the opportunity to take part in the program and anticipation of the Disciplinary Commons experience. As one participant said:

I very much welcome the opportunity for the collective sharing of teaching experiences and to participate in the commons process.

One participant commented that she/he is a new faculty member therefore her/his responses are "based upon previous experience and, some, what is anticipated to come." Finally, one participant requested that the meetings be reduced or some held by video conferencing to reduce the time burden for participants.

II. Pre- and Post-survey

This section provides detailed, descriptive findings for items presented on both the pre- and post-surveys.

All Disciplinary Commons participants were asked first on the pre-survey how often they engage in a series of seven reflective activities and, subsequently, on the post-survey, they were asked how often they plan to engage in these reflective activities in the coming year. As shown in Table B12, the likelihood that participants will document reflections on their teaching, try a new teaching practice based on reflection, and try a new teaching practice based on scholarly work increased the most between pre- and post-survey administrations. Effects sizes⁹ were moderate ($d = .66, .58, \text{ and } .52$, respectively) indicating that these may be meaningful differences.

Table B12. Please indicate how often you engage in the following activities (pre- and post-responses)

		Never/ Not at all	Once a year or less	Approx. once per term	Several times during each term	Many times during each term	<i>M</i>	<i>SD</i>	<i>n</i> _{Mean}	<i>d</i>
		1	2	3	4	5				
Reflect on your teaching practices	Pre	0 (0.0%)	0 (0.0%)	4 (21.1%)	9 (47.4%)	6 (31.6%)	4.11	.74	19	
	Post	0 (0.0)	2 (11.8)	4 (23.5)	5 (29.4)	6 (35.3)	3.88	1.05	17	-.25
Document your reflections on your teaching (e.g., journal, teaching portfolio)	Pre	3 (15.8)	7 (36.8)	7 (36.8)	2 (10.5)	0 (0.0)	2.42	.90	19	
	Post	0 (0.0)	5 (29.4)	8 (47.1)	3 (17.6)	1 (5.9)	3.00	.87	17	.66
Read scholarly work on teaching in the discipline	Pre	0 (0.0)	5 (26.3)	4 (21.1)	8 (42.1)	2 (10.5)	3.37	1.01	19	
	Post	1 (5.9)	1 (5.9)	7 (41.2)	5 (29.4)	3 (17.6)	3.47	1.07	17	.10
Attend workshops or conferences with a focus on computing education	Pre	2 (10.5)	13 (68.4)	4 (21.1)	0 (0.0)	0 (0.0)	2.11	.57	19	
	Post	2 (11.8)	10 (58.8)	3 (17.6)	1 (5.9)	1 (5.9)	2.35	.99	17	.30
Consult with a faculty development office or staff member on campus	Pre	8 (42.1)	6 (31.6)	1 (5.3)	2 (10.5)	2 (10.5)	2.16	1.39	19	
	Post	4 (23.5)	5 (29.4)	4 (23.5)	3 (17.6)	1 (5.9)	2.53	1.23	17	.28
Try a new teaching practice based on reflection	Pre	0 (0.0)	9 (47.4)	8 (42.1)	2 (10.5)	0 (0.0)	2.63	.68	19	
	Post	0 (0.0)	6 (35.3)	4 (23.5)	6 (35.3)	1 (5.9)	3.12	.99	17	.58
Try a new teaching practice based on student feedback	Pre	0 (0.0)	9 (47.4)	5 (26.3)	5 (26.3)	0 (0.0)	2.79	.86	19	
	Post	0 (0.0)	5 (29.4)	4 (23.5)	7 (41.2)	1 (5.9)	3.24	.97	17	.49

⁹ The effect size (Cohen's d) is generally considered an indicator of the "practical significance" of the difference between two respective means. The effect size is found by dividing the difference between the pre- and post-survey means with the pooled standard deviation across both pre- and post-surveys. As such, it serves to contextualize the mean difference. An effect size can be small if $d = .20$, moderate if $d = .50$, or large if $d = .80$, with a moderate or large effect size suggesting a substantive difference between two means.

		Never/ Not at all	Once a year or less	Approx. once per term	Several times during each term	Many times during each term	<i>M</i>	<i>SD</i>	<i>n</i>	<i>Mean</i>	<i>d</i>
		1	2	3	4	5					
Try a new teaching practice based on scholarly work	Pre	4 (21.1)	8 (42.1)	6 (31.6)	1 (5.3)	0 (0.0)	2.21	.86	19		
	Post	2 (11.8)	5 (29.4)	7 (41.2)	2 (11.8)	1 (5.9)	2.71	1.05	17		.52
Conduct an informal study to assess the impact of changes to your teaching	Pre	3 (15.8)	5 (26.3)	9 (47.4)	2 (10.5)	0 (0.0)	2.53	.91	19		
	Post	1 (5.9)	11 (64.7)	3 (17.6)	1 (5.9)	1 (5.9)	2.41	.94	17		-.13
Employ a method of assessment beyond standard course evaluations	Pre	1 (5.9)	8 (47.1)	4 (23.5)	4 (23.5)	0 (0.0)	2.65	.93	17		
	Post	2 (12.5)	6 (37.5)	3 (18.8)	4 (25.0)	1 (6.3)	2.75	1.18	16		.09

Comparison of the U.S. and U.K. means pre to post- on these items are presented in Table B13, and the most pronounced differences (both pre- to post-, and the interaction between time point and group) are presented in Figure B16.

Table B13. Comparison of pre and post- mean ratings about participants' plans to engage in various activities from 1 = "Never/Not at all" to 5 = "Many times during each year," according to Disciplinary Commons (U.S. and U.K.)

	U.S.		U.K.	
	Pre	Post	Pre	Post
Reflect on your teaching practices	4.00	3.86	4.17	3.90
Document your reflections on your teaching (e.g., journal, teaching portfolio)	2.57	3.29	2.33	2.80
Read scholarly work on teaching in the discipline	3.71	3.86	3.17	3.20
Attend workshops or conferences with a focus on computing education	2.14	2.71	2.08	2.10
Consult with a faculty development office or staff member on campus	2.29	2.86	2.08	2.30
Try a new teaching practice based on reflection	2.86	3.43	2.50	2.90
Try a new teaching practice based on student feedback	3.29	3.43	2.50	3.10
Try a new teaching practice based on scholarly work	2.57	2.86	2.00	2.60
Conduct an informal study to assess the impact of changes to your teaching	3.29	2.57	2.08	2.30
Employ a method of assessment beyond standard course evaluations	3.00	3.00	2.40	2.56

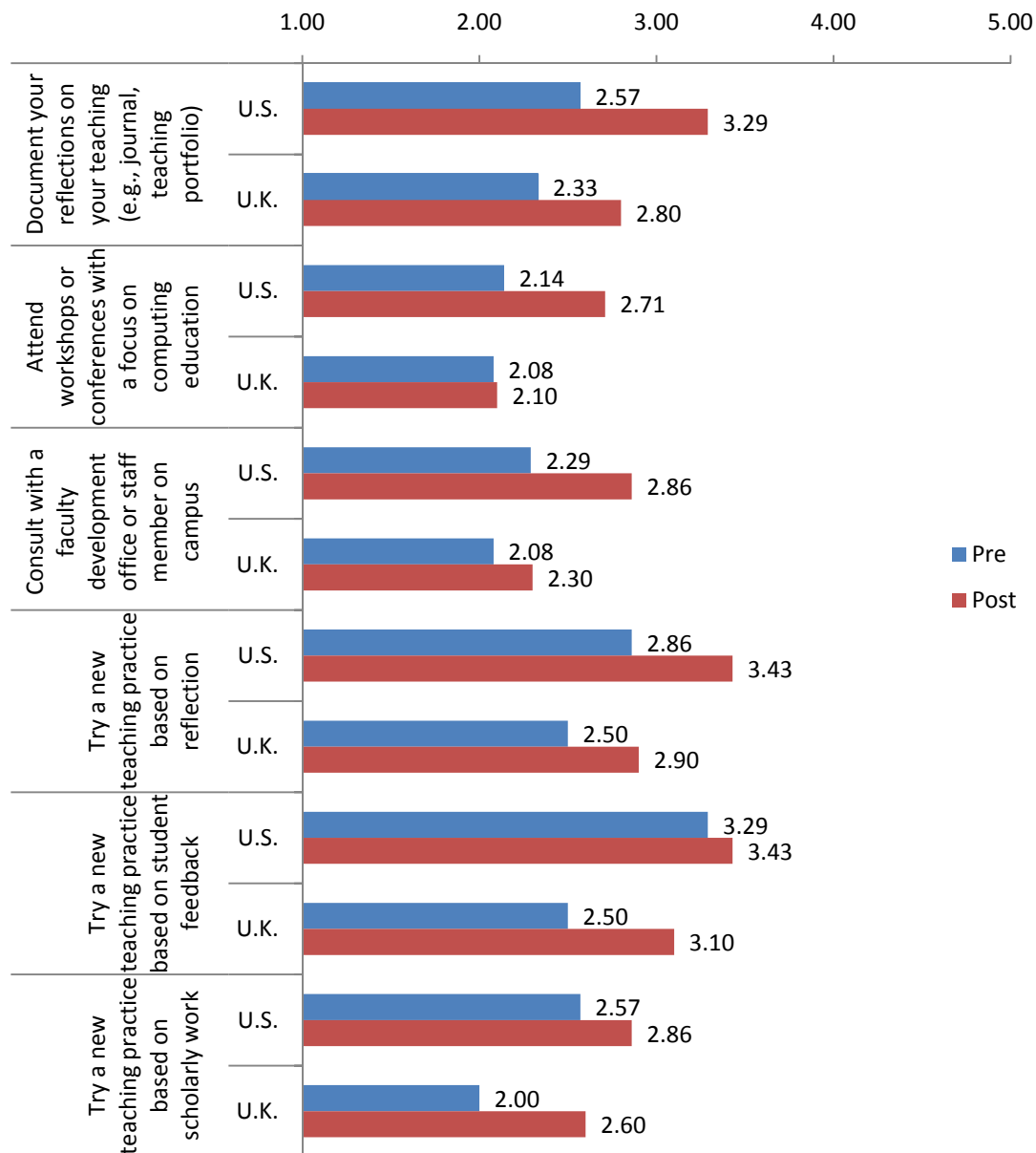


Figure B16. Pre- and post- mean ratings for selected items related to participants' plans to engage in various activities, from 1 = "Never/Not at All" to 5 = "Many times during each year," according to Disciplinary Commons (U.S. and U.K.)

As can be seen from Figure B16, it appears that the pre- to post-change in "Attend workshops or conferences with a focus on computing education," and "Consult with a faculty development office or staff member on campus," were due almost entirely to increased ratings in the U.S. group (from \underline{M} = 2.14 to \underline{M} = 2.71, and \underline{M} = 2.29 to \underline{M} = 2.86, respectively). In contrast, the pre- to post-changes in "Try a new teaching practice based on reflection" and "based on student feedback" were more dramatic for U.K. participants (\underline{M} = 2.50 to \underline{M} = 3.10, \underline{M} = 2.00 to \underline{M} = 2.60) than U.S. participants (\underline{M} = 3.29 to \underline{M} = 3.43, \underline{M} = 2.57 to \underline{M} = 2.86).

\ Between pre- and post-survey administrations, participants agreement that they understand the difference between a teaching portfolio and a course portfolio, can clearly articulate their teaching philosophy, and can provide concrete examples to illustrate their teaching philosophy all increased markedly with moderate effect sizes ($d = .65, .52, \text{ and } .61$, respectively), suggesting that these may be meaningful changes. See Table B14.

Table B14. Please indicate how much you agree or disagree with the following statements.

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	SD	n_{Mean}	d
		1	2	3	4	5				
I understand the difference between a teaching portfolio and a course portfolio	Pre	1 (5.3%)	5 (26.3%)	7 (36.8%)	4 (21.1%)	2 (10.5%)	3.05	1.08	19	
	Post	1 (5.9)	1 (5.9)	3 (17.6)	8 (47.1)	4 (23.5)	3.76	1.09	17	.65
I can clearly articulate my teaching philosophy	Pre	0 (0.0)	3 (15.8)	7 (36.8)	5 (26.3)	4 (21.1)	3.53	1.02	19	
	Post	0 (0.0)	1 (5.9)	2 (11.8)	10 (58.8)	4 (23.5)	4.00	.79	17	.52
I can provide concrete examples to illustrate my teaching philosophy	Pre	0 (0.0)	1 (5.3)	7 (36.8)	8 (42.1)	3 (15.8)	3.68	.82	19	
	Post	0 (0.0)	1 (5.9)	1 (5.9)	9 (52.9)	6 (35.3)	4.18	.81	17	.61

Next, on both the pre- and post-surveys, participants were asked open-ended questions about the primary purpose of a course portfolio and whether they have any reservations about sharing their course portfolio publicly. On the post-survey, participants were also asked to describe the benefits, if any, of generating a course portfolio.¹⁰

First, when asked what they believe is the primary purpose of a course portfolio, on the pre-survey, 16 participants offered responses. Three participants (all U.K. participants) indicated that they were unclear about what exactly a course portfolio is. The remaining participants commonly described it as the process by which you document a course (e.g., how it is taught, learning goals, etc.) to share with others. See Table B15 for a list of all verbatim responses.

¹⁰ On the pre-survey, participants were asked about the benefits of sharing their course portfolio. These data are provided in the “pre-survey only” section.

Table B15. What do you believe is the primary purpose of a course portfolio? Pre-survey responses

U.S. Responses
If my understanding of the SE course portfolio is correct, it provide a framework from which to develop and refine a SE program for the purpose of reflection and improvement.
Document and assess teaching effectiveness as it relates to students' learning, and learning outcomes.
To better understand the effectiveness of course-specific approaches.
Document the teaching and learning methodology, material, goals, expected outcomes, and requirements for a particular course.
To document the learning objectives of a course, to document what students learn from a course, to document how the course was taught, to documents students and instructors take on how a course was conducted, to document concrete examples of methodologies used to teach learning objectives and to document recommendations for the future.

U.K. Responses
To document a course as a base point for reflection and, hopefully, enhancement.
To document the complete process of design, delivery, assessment and evaluation of a specific course (=module).
Enabling the sharing of approaches, practice etc.
Not sure of the distinction here.
To describe the academic content and context of a course.
I am not very clear about this.
To align content with learning outcomes.
Sharing of knowledge and expertise.
As 15d?
Not sure- not clear what it is.
To document the practice and experience of teaching a specific course.

On the post-survey, 17 participants provided a response to what they believe the primary purpose of a course portfolio is. After taking part in the Disciplinary Commons, only one participant indicated that she/he was still “not sure” what the primary purpose of a course portfolio is as compared with three participants on the pre-survey. By and large, responses were similar to those provided on the pre-survey. Overall, U.S. participants tended to provide more in-depth responses to this question. See Table B16 for all verbatim responses.

Table B16. What do you believe is the primary purpose of a course portfolio? Post-survey responses

U.S. Responses

To improve the way in which the topic is taught through reflection of one's own approach and evaluation of the approaches taken by others.

Document ones' teaching philosophy, course design and how the course fits into the curriculum in general, presentation of course material - a reflection on what worked and what didn't work and the necessary steps remedy what might not have worked. The portfolio serves to raise ones' level of awareness of all the components which go into one becoming a more effective instructor and being able to share these with others in the teaching profession.

It is an instrument to document and share a strategy for preparing and teaching a course that was built on the sharing of ideas by a group with a common interest and goal.

The primary purpose of a course portfolio is to provide a medium for communicating and refining your understanding, experience, and content of your course.

It is a record of what has been done in a course. Like an application system it has to be maintained for it to be current and useful. It is shared with someone who is somewhat new to teaching Software Engineering.

Document and share your decisions/experiences in teaching a specific course.

1) Reflect on Course Material. 2) Repository to share information about your course with the wider audience.

U.K. Responses

To formalise the structure of the learning process and generate an artefact that can be used as a basis for discussion and debate.

To record evidence & capture a snapshot of the teaching practice.

To document current practice and philosophy of teaching.

Not sure.

For sharing practice.

To focus the reflection on the commons, and to give it a clear objective.

A representation of the course.

Documenting and reflecting on practice.

A concrete and consolidated view for a module.

A reflective description of a course for others to potentially draw upon.

Next, participants on both the pre- and post-survey were asked whether they had any reservations about sharing their course portfolios with others. On the pre-survey, 10 participants chose to offer a response. Three participants said that they had no reservations and one said that she/he didn't have reservations but thought that the institution might. Other reservations voiced by participants included things being taken out of context, "inadequacies in content and structure," and "theft." See Table B17 for all responses verbatim.

Table B17. Please describe any specific reservations you have about sharing your course portfolio. Pre-survey responses

U.S. Responses
Like the experience factory concept, unvetted or non-refined context can obscure the information you really want for a course. Just look at experience with software reuse (both successes and failures).
I have no specific reservations about sharing my course portfolio.
No reservation.

U.K. Responses
None personally, but the institution might have reservations.
A course portfolio (as I define it above) abstract the lecturer's personal practice from the documents and evidence gathered. That aspect of practice can make a great difference to courses; it needs to be apparent.
Again, inadequacies in content and structure may be revealed.
Theft!
The course must be seen as a whole; elements should not be taken out of context.
As 15f?

When asked the identical question on the post-survey, 17 participants offered a response with seven participants reporting that they had no reservations. Two participants alluded to the fact that the course portfolio is a working document and it is possible that it might be judged unfairly by others who perceive it as a more polished document. Moreover, participants mentioned the sensitive nature of sharing student work and the fact that aspects of the portfolio might be taken out of context. See Table B18 for all responses verbatim.

Table B18. Please describe any specific reservations you have about sharing your course portfolio. Post-survey responses

U.S. Responses
It requires revisions and an emphasis that it was created by someone who currently has minimal experience in teaching in this area.
No reservation at this point.
No reservation.
Until a course portfolio is mature enough, public exposure may bring unwanted attention and prejudice.
Since textbooks are used in my situation, some of the course material in the portfolio are from the textbook; so the instructors, who are not using the same textbook, may have to indicate sources. Further, I am an IBM Academic Initiative member. So, I get to use material from them in my course. These issues have to be taken care of by the users.
Student work and performance statistics.
None

U.K. Responses
The audience for the portfolio was not clearly defined at the outset. It depends how "publicly" is defined - the assumptions shared will not be justified for the whole "public."
I am concerned that once public it may be difficult to revise it.
The likely poor standard of the finished portfolio.
Some of the ideas described there are very context dependent. It is important to be able to factor out that context if the work is to have any relevance elsewhere and in the future.
Some self censorship is inevitable; incidents which it might have been useful to have discussed could not be used for ethical reasons.
I need to pick artefacts very carefully in order to be able to continue re-using the coursework scenarios I have used successfully for a number of years. Same applies to the online test...I won't publish the questions in the portfolio, so that I can continue to use them.
None (4)

On the pre-survey, participants were asked what aspects or qualities (if any) of the Disciplinary Commons they think will be most valuable to them and on the post-survey they were asked what aspects or qualities were indeed the most valuable to them. First, on the pre-survey all 19 participants offered a response and nearly three-quarters mentioned the opportunity to interact with colleagues and exchange teaching practices. Specifically, they noted the opportunity to learn about “different approaches” and compare teaching strategies. Along a similar vein, several participants cited networking opportunities as an aspect of the Disciplinary Commons that will be most valuable to them. See Table B19 for a summary of responses.

Table B19. What aspects or qualities (if any) of the Disciplinary Commons do you think will be the most valuable to you?

Most valuable	Frequency/Percentage ¹¹
Sharing/Interaction with colleagues	14 (73.7%)
Networking opportunities	3 (15.8)
Will improve my teaching	2 (10.5)
Portfolio construction	2 (10.5)
Opportunity to reflect	2 (10.5)
Don't know	1 (5.3)
Everything	1 (5.3)
Having course reviewed	1 (5.3)
Peer observation	1 (5.3)

On the post-survey, participants were asked what aspects or qualities of the Disciplinary Commons they found most valuable and 14 participants provided a response. Again, sharing ideas and interacting with colleagues was the most common responses. More specifically, participants mentioned the relaxed atmosphere of the Disciplinary Commons and the openness of participants. See Table B20 for a summary of responses.

Table B20. What aspects or qualities (if any) of the Disciplinary Commons did you find the most valuable

Most valuable	Frequency/Percentage
Sharing/Interaction with colleagues	8 (57.1%)
Networking opportunities	2 (14.3)
Openness of participants/relaxed atmosphere	2 (14.3)
Everything	1 (7.1)
Workshops	1 (7.1)

Finally, participants were asked what aspects or qualities (if any) of the Disciplinary Commons they think will be less valuable to them and, on the post-survey, what aspects or qualities (if any) were the least valuable. First, on the pre-survey, a total of 14 participants offered a response. Four participants said they didn't know and two said, "none." Four participants cited aspects of portfolio development with one participant stating, "The process will be more valuable than the final published portfolio." The remaining aspects or qualities mentioned included:

- Travel time (2 participants)
- Unstructured meetings
- Too much focus on course content

On the post-survey, 13 participants offered a response. Three participants said "nothing" and three mentioned that travel time to various sites was particularly difficult. Three participants mentioned that peer review of portfolios was sometimes difficult because not all participants could keep up with the demands of the commons. For example, as one participant said:

¹¹ Since participants' responses were coded according to multiple categories, percentages will exceed 100%.

Feedback on draft portfolios was almost non-existent and impossible to give because of the timing and participants' inability to provide drafts as scheduled. One or two of the exercises were a complete waste of time.

The aspects below were cited by one participant each as parts of the Disciplinary Commons that they found the least valuable.

- Some readings
- Lack of organization
- Some activities
- Not enough peer review materials online

III. Post-survey Only

Section 1: Your Participation & Portfolio

This section provides detailed, descriptive findings for items presented only on the post-survey. As illustrated in Figure B20, no Disciplinary Commons participant reported missing more than two sessions. Around half of participants reported missing one session (8 of 17, 47.1%) and 35.3% (6 of 17) reported that they didn't miss any.

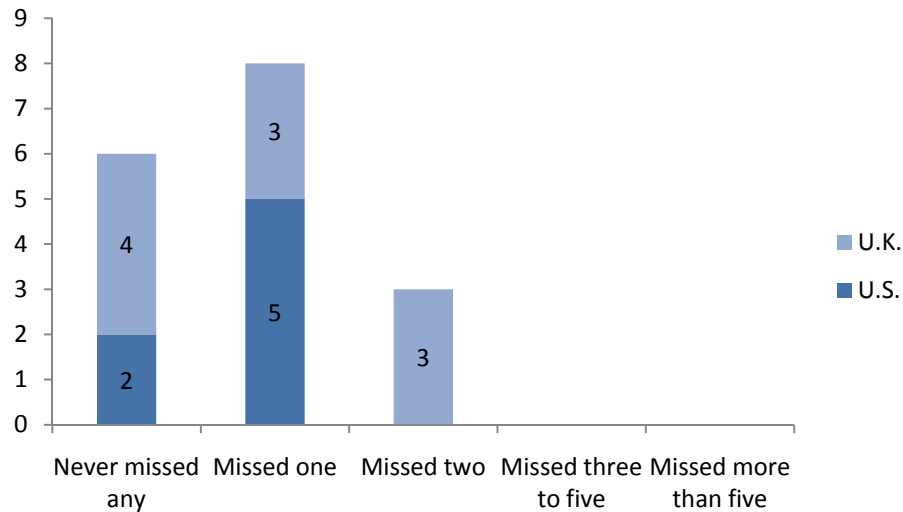


Figure B20. Comparison of U.S. and U.K. responses to how many Disciplinary Commons sessions they attended

When asked approximately what proportion of monthly “homework” assignments they completed, most participants reported missing two or fewer homework assignments (15 of 17, 88.2%). However, two U.K. participants reported that they missed three to five. See Figure B21.

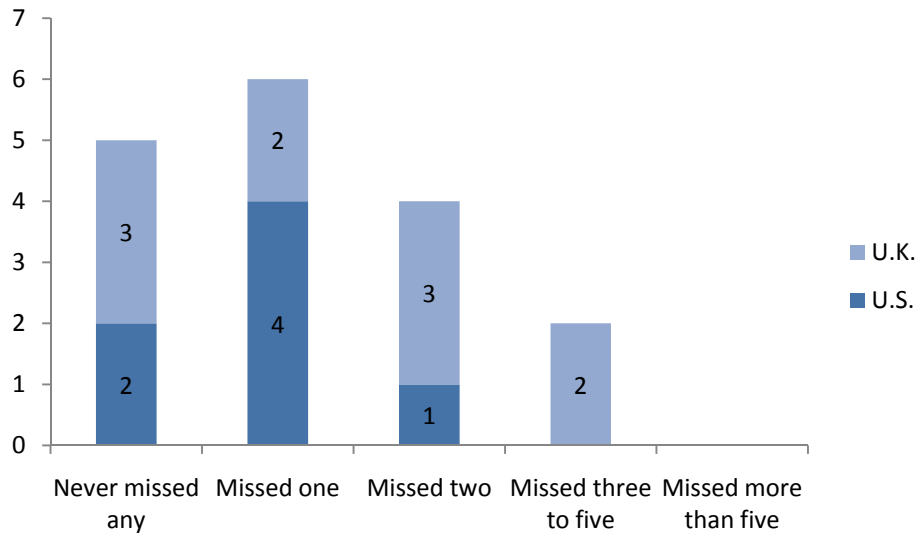


Figure B21. Comparison of U.S. and U.K. responses to what proportion of monthly “homework” assignments they completed

As illustrated in Figure B22, U.S. Disciplinary Commons participants were most likely to indicate that they wrote private, reflective comments relating to their teaching and/or course approximately once per month (3 of 7, 42.9%) whereas U.K. participants were more likely to indicate that they did so several times, but not systematically (4 of 10, 40.0%).

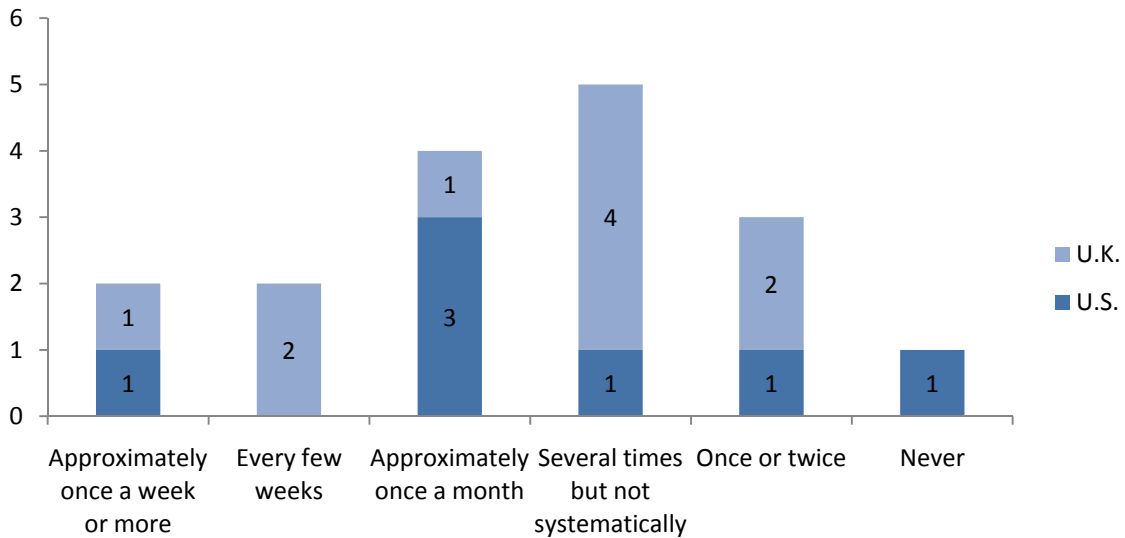


Figure B22. Comparison of U.S. and U.K. responses to the question of how often they wrote reflective comments related to their course/module or teaching that are private

As shown in Figure B23, one-half of U.K. participants indicated that their course portfolio is complete whereas nearly all U.S. participants (6 of 7 or 85.7%) reported that all of the components are complete but the portfolio still needs some revisions and/or refinement.

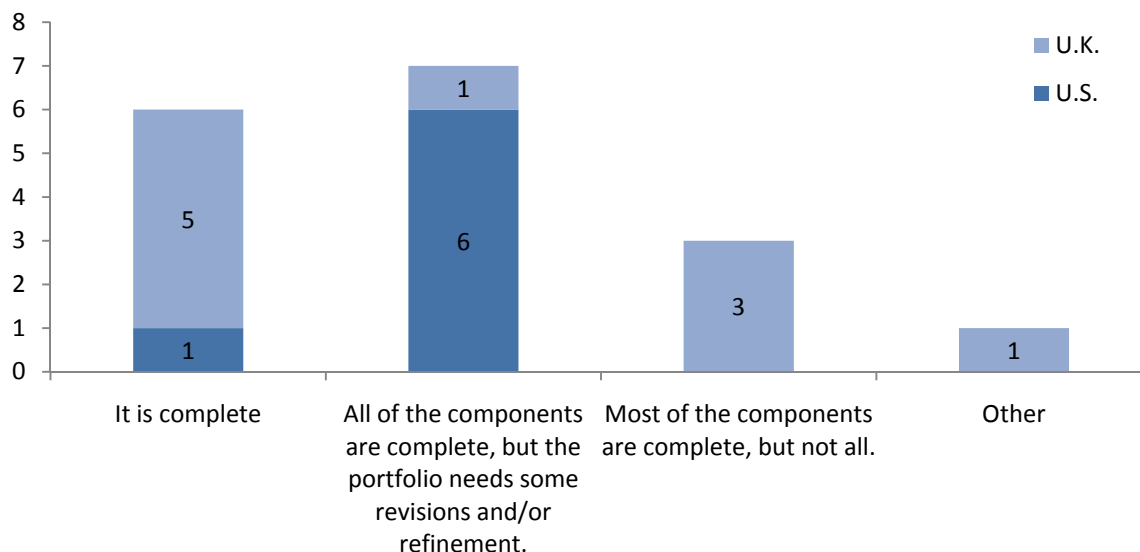


Figure B23. Comparison of U.S. and U.K. responses to the question: “At this point, what would you say is the status of your course portfolio?”

Next, all participants were asked how, if at all, they think they will use their course portfolio in the future and 16 participants provided a response. Participants mentioned that they will use their course portfolio for a wide array of purposes including self-reflection, to document course changes over time and to provide a guide for others teaching the course in the future. Several participants also mentioned that they might use the course portfolio, or some portion of it, for promotion/tenure purposes. One participant indicated that she/he wasn’t sure how it would be used in the future and another said that she/he probably wouldn’t use it because it was in such an “incomplete state” and probably wouldn’t be completed due to time constraints. See Table B21 for a list of all responses verbatim.

Table B21. How, if at all, do you think you will use your course portfolio in the future?

U.S. Responses
Not sure.
As a document I can use as a resource in my teaching, a document I can share with others. Colleagues - with the hope it will encourage them to realize the importance of documenting their course-related activities
I will use it to document the changes in the course, as it evolves over time. It will also serve as a guide for other members of the department.
It will provide an ongoing basis for the course and program here at [our institution]. However, my hope is that we can incorporate a portfolio concept here that is relatively non-invasive.
I plan to share with a colleague who might teach this course-sequence. I will be updating it as things change. It certainly is a useful document.
Self reflection, sharing with colleagues, teaching portfolio, promotion and tenure.
It was a reflective exercise that helped me gather my thoughts on how to move forward with the course.
U.K. Responses
For reference and possibly, in a modified form, for promotion.
Apply the same principles & structure to develop another course portfolio in other modules that I teach.
Probably won't due to its being in such an incomplete state, and unable to find enough time to get it to the standard that I would deem to be satisfactory.
For personal reflection. May include in future application for promotion.
I will certainly use the reflection that brought the portfolio, to feed later runs of the course, communicate to colleagues - the actual portfolio, I'm less sure.
Have already used it to share module evaluation with other members of the teaching team
Refer back to myself at a later date. Share with colleagues if interested. I'm also considering pointing future students on this module to the portfolio if they want to find out more about the module than I can tell them in the introduction, i.e. use it almost in place of a "module booklet".
As a point of reference and snapshot of 2010 status.
In order to describe the course to interested tutors (and even students).

Next, participants were asked, other than putting their portfolio online, whether they planned to share their course portfolio (or part of it) with anyone else outside of their Disciplinary Commons cohort. Nearly all U.S. participants (6 of 7, 85.7%) said "yes," compared with 70.0% (7 of 10) U.K. participants.

As a follow-up, participants were asked with whom do they plan on sharing their portfolio, and they were asked to select all from a list of nine options. As shown in Figure B24, participants were most likely to report that they would share their portfolio with other instructors at their institution in their department (12 of 17, 70.6%), instructors at other institutions in the discipline (7 of 17, 41.2%), and their department chair (7 of 17, 41.2%). Two participants chose "other," with one stating "anyone who wishes to use it," and another indicating she/he would share it with students.

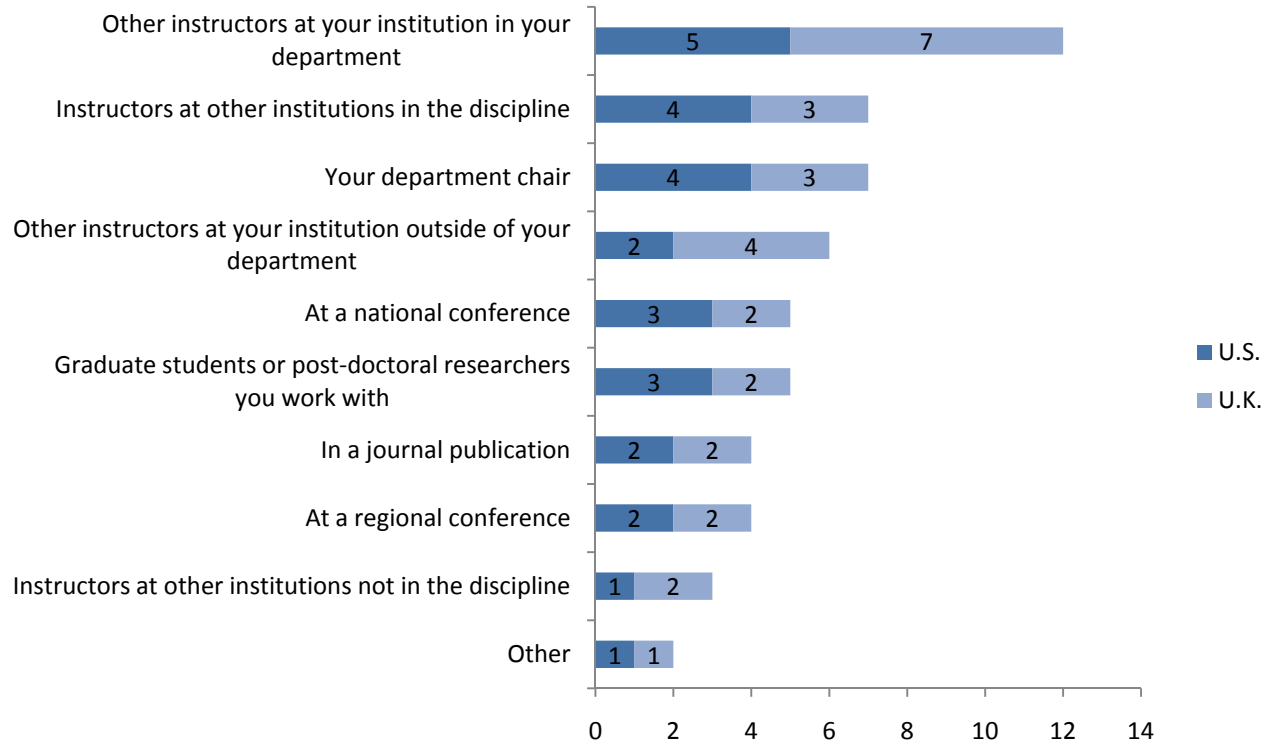


Figure B24. U.S. and U.K. responses to the question: “With whom do you plan on sharing your course portfolio (public version)? Select all that apply.

After taking part in Disciplinary Commons, participants were asked to respond to the open-ended question: “In general, what would you say are the benefits, if any, of generating a course portfolio?” and all 17 participants offered a response. Notably, the overwhelming majority of responses included the opportunity to “reflect” in some form. More specifically, participants mentioned that the act of generating a course portfolio enabled them to reflect for purposes of improving the course, their teaching and students’ learning. See Table B22 for all responses verbatim.

Table B22. In general, what would you say are the benefits, if any, of generating a course portfolio?"

U.S. Responses
Self-reflection and organization for improvement.
The response here has much in common with the response to the last question. The benefits include forcing one to document ones' teaching philosophy, course design and how the course fits into the curriculum in general, presentation of course material - a reflection on what worked and what didn't work and the necessary steps remedy what might not have worked. The portfolio serves to raise ones' level of awareness of all the components which go into one becoming a more effective instructor, and being able to share these with others in the teaching profession.
Allows you to reflect on the wider aspect of ones teaching philosophy and focus the course towards the enhancement of the students' learning.
Refinement of material; Refinement if ideas; Improvement of course content; Learning and evolution of course content and teaching; Availability of a cohort whom I can work with to improve my teaching and course.
It helps to reflect and, if you are in a Commons, can make refinements to your perception of the course and make considerable improvements in design and delivery.
Document and reflect on a course for self assessment, an important artifact for promotion and/or tenure applications.
It forces you to reflect.
U.K. Responses
Encouraging reflection, discussion and sharing of knowledge.
Stimulates thinking & reflection of teaching, learning and instructional design in general.
It requires the reification of reflections and ideas that would not otherwise be recorded.
Future employability and reflection on my teaching and learning strategies.
Encourages personal reflection, provides evidence of participation and reflection.
As above, share reflections, and summarise the module.
Ensures evaluation & reflection at a much deeper level than is normally possible.
Taking time to reflect.
A digital memory and a realisation of what you did and achieved.
As above, but also enables continued improvement of the course through reflection.

Section 2: Your Disciplinary Commons Experience

On a scale from 1 "No, not at all" to 4 "Yes, definitely," participants were asked a series of questions about how, if at all, their teaching had changed during their Disciplinary Commons experience. Participants were most likely to report that they had gained new ideas for teaching practices from other Disciplinary Commons participants ($\underline{M} = 3.59$) with nearly all choosing "Yes, somewhat" or "Yes, definitely." Moreover, participants were likely to affirm that they had developed ideas for changing software engineering courses outside of the one addressed in their portfolio ($\underline{M} = 3.44$). In contrast, participants were least likely to indicate that they had changed their teaching practices during the year ($\underline{M} = 2.65$) or made changes to other software engineering courses other than the one addressed in their portfolio ($\underline{M} = 2.82$). See Table B23 for all frequencies and means.

Table B23. During your Disciplinary Commons experience did you...

	No, not at all	Not really, or only sort of	Yes, somewhat	Yes, definitely	Mean	SD	n _{Mean}
	1	2	3	4			
...come to better understand your teaching philosophy?	0 (0.0%)	4 (23.5%)	9 (52.9%)	4 (23.5%)	3.00	.71	17
...see new connections between your teaching philosophy and teaching practices?	0 (0.0)	4 (23.5)	9 (52.9)	4 (23.5)	3.00	.71	17
...connect concepts from one monthly Commons session to concepts from previous monthly Commons sessions?	0 (0.0)	8 (47.1)	3 (17.6)	6 (35.3)	2.88	.93	17
...gain new ideas for teaching practices from other Disciplinary Commons participants?	0 (0.0)	1 (5.9)	5 (29.4)	11 (64.7)	3.59	.62	17
...adopt practices from other Disciplinary Commons participants?	0 (0.0)	1 (5.9)	8 (47.1)	8 (47.1)	3.41	.62	17
...change your teaching practices during the year?	1 (5.9)	7 (41.2)	6 (35.3)	3 (17.6)	2.65	.86	17
...make plans to change your teaching practices the next time you teach this course?	0 (0.0)	4 (23.5)	6 (35.3)	7 (41.2)	3.18	.81	17
...makes changes to software engineering courses beyond the one addressed in your portfolio?	0 (0.0)	6 (35.3)	8 (47.1)	3 (17.6)	2.82	.73	17
...develop ideas for changing software engineering course beyond the one addressed in your portfolio?	0 (0.0)	0 (0.0)	9 (56.3)	7 (43.8)	3.44	.51	16

Figure B25 shows comparisons between the two cohorts (U.S. and U.K.) for the items in the table above. U.K. participants were more likely to indicate that they had gained ideas for teaching practices from other Disciplinary Commons participants; however, the difference was not statistically significant. However, U.K. participants were significantly more likely¹² to affirm that they had come to a better understanding of their teaching philosophy as a result of the Disciplinary Commons experience.

¹² Independent samples t-test: $t(15) = -2.34, p < .05$

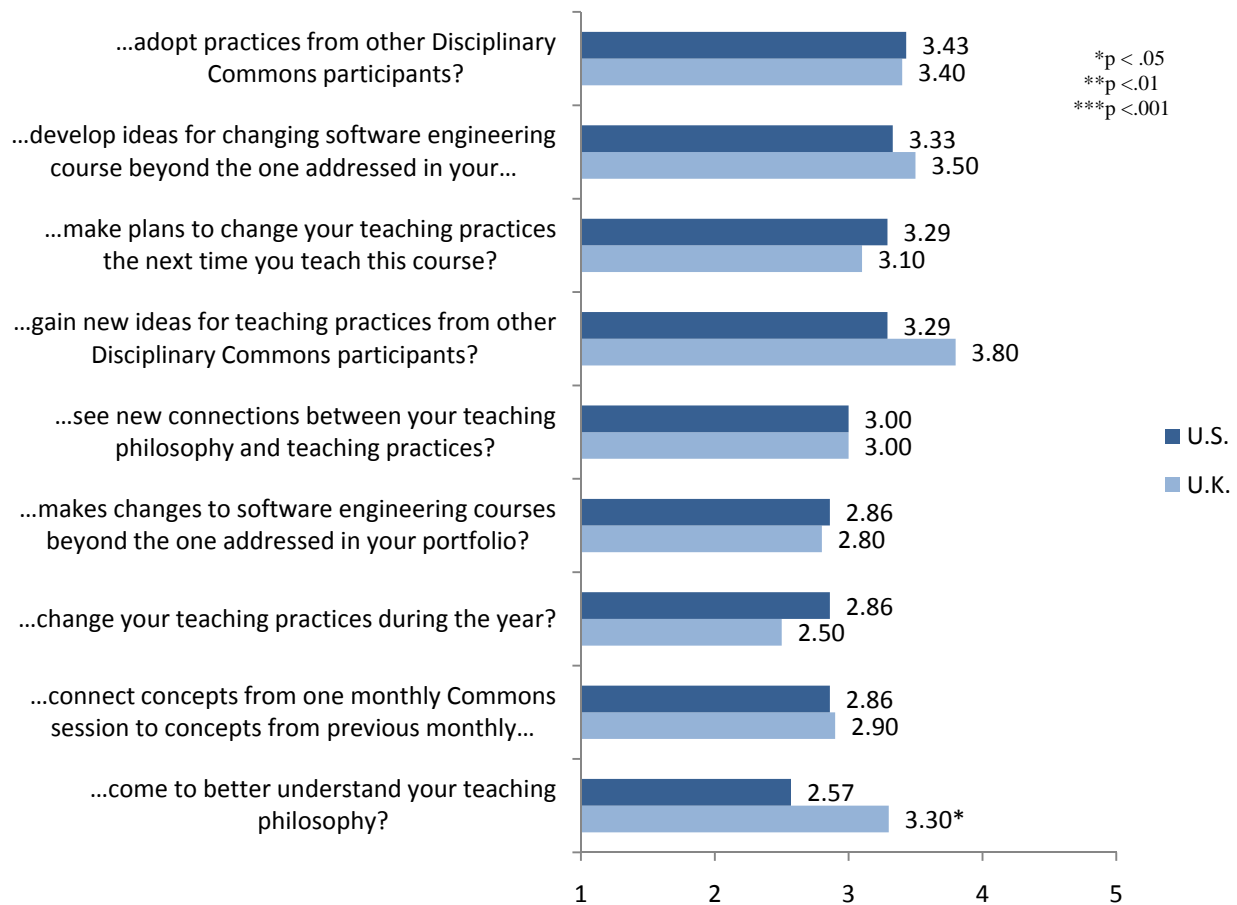


Figure B25. U.S. and U.K. comparison to the questions: "During your Disciplinary Commons experience did you..."

Next, participants were asked to indicate how much they agree or disagree (on a scale from 1 "Strongly Disagree" to 5 "Strongly Agree") with a series of statements about the effect of participating in Disciplinary Commons. All means fell between "Neutral" and "Agree" with participants most likely to agree that they now have a better understanding of why they teach the course the way they do ($M = 3.82$). Results are presented in Table B24.

Table B24. Please indicate how much you agree with the following statements about your Disciplinary Commons experience.

As a result of my Disciplinary Commons Experience...	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	SD	n _{Mean}
	1	2	3	4	5			
...I have a clearer understanding of the learning objectives for the course that I investigated.	1 (5.9%)	0 (0.0%)	6 (35.3%)	7 (41.2%)	3 (17.6%)	3.65	.99	17
...I have a better understanding of why I teach this course the way that I do.	0 (0.0)	0 (0.0)	6 (35.3)	8 (47.1)	3 (17.6)	3.82	.73	17
... the course that I investigated has better alignment between the learning objectives, the teaching and learning activities, and the learning assessments.	1 (5.9)	1 (5.9)	5 (29.4)	7 (41.2)	3 (17.6)	3.59	1.06	17
.... I now have a better understanding of what "good teaching" is.	0 (0.0)	2 (11.8)	7 (41.2)	7 (41.2)	1 (5.9)	3.41	.80	17
... I am better able to provide feedback to colleagues on their teaching and course materials.	0 (0.0)	1 (5.9)	6 (35.3)	7 (41.2)	3 (17.6)	3.71	.85	17

Figure B26 shows comparisons between the two cohorts (U.S. and U.K.) for the items in the table above. None of the differences were statistically significant.

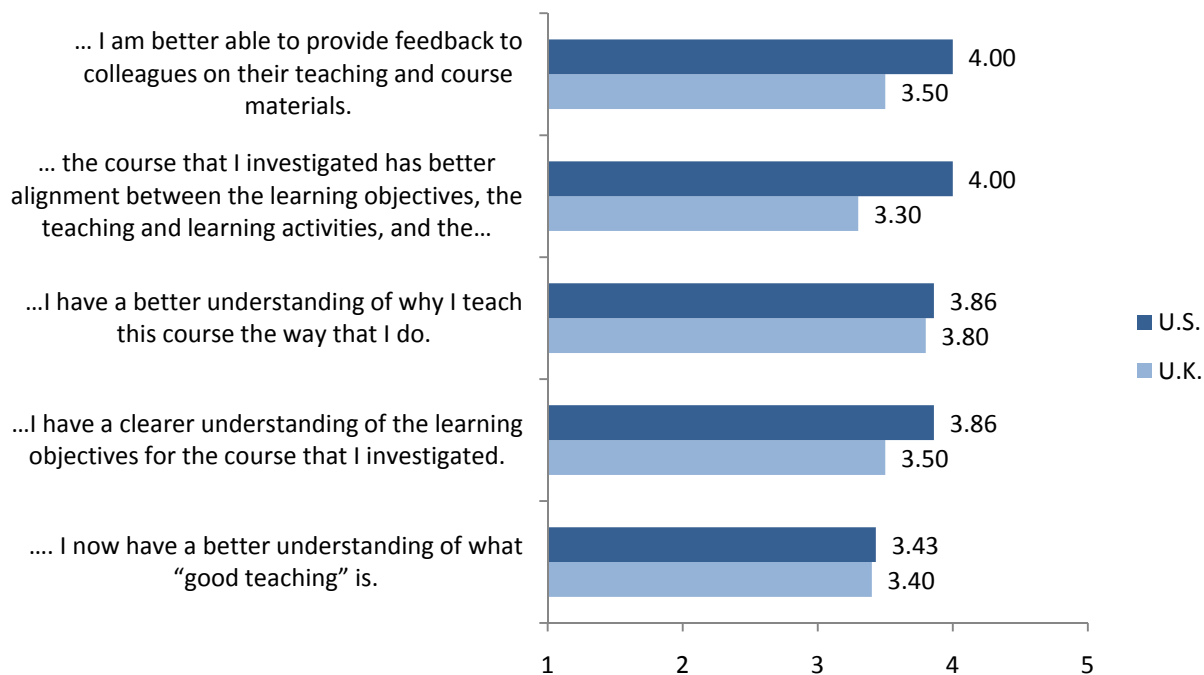


Figure B26. U.S. and U.K. comparison to the questions: "As a result of my Disciplinary Commons experience..."

Participants were asked what, if anything, they would say was the most important insight gained during their Disciplinary Commons experience and 14 participants offered a response. Participants commonly mentioned that they came to realize that there are many “valid approaches” to teaching software engineering classes. Moreover, participants discussed the importance of collaborating with others to share “good practices” and “tackle” common issues. See Table B25 for all responses verbatim.

Table B24. What, if anything, would you say was the most important insight you gained during your Disciplinary Commons experience?

U.S. Responses
Other approaches.
Perhaps the most important thing was to realize the commonality of issues which exists among software engineering colleagues and the approaches used to tackle these issues. It was insightful in getting feedback from fellow Commoners regarding approaches to presenting certain concepts, as well as the different paradigms utilized by some.
Teaching can and should be a collaborative effort between educators.
The opportunity to move the SE education forward with a cohort of interested parties.
Appreciating other ways of teaching the Software Engineering course; need to adapt to changing circumstances.
U.K. Responses
The influence of the individual practitioner and the difficulty of the job.
Sharing good practices & how we all dealt with similar challenges across institutions.
It was most interesting to hear the accounts of how other deal with difficulties similar to mine.
Ability to compare the content of my module with other commons participants.
The diversity of valid approaches to teaching databases.
Insight into the role of formative as well as end of module evaluation.
Sharing ideas with other practitioners.
Sharing is better than not. You don't know what you don't know but sometimes it is better that you do!
We all share common problems that we need to try to solve.

As a follow-up question, participants were asked how the aforementioned insight came about and/or what led them to this new knowledge and 13 participants offered a response. Nearly all participants (12 of 13 or 92.3%) commented that the opportunity for informal discussions with their peers led to their insights/new knowledge. One participant explained her/his reasoning:

This was just through the discussions at the monthly meetings when one would present an approach that he used, and another participant would then present a different approach that he had used. The discussion which followed was insightful in seeing the similarities/differences as well as the advantages/disadvantages involved in a particular approach.

Similarly, another participant said:

Observation of some very skilled individuals and their wise comments and the interesting and effective techniques they deployed. Also, that the same problems are reflected in many different institutions.

Section 3: Community of Practice

On a scale from 1 “Not at all valuable” to 4 “Extremely valuable,” Disciplinary Commons participants were asked to rate the value of various types of interactions with their peers. As illustrated in Table B26, participants reported that informal interactions in small groups and plenary discussions were the most valuable ($M_s = 3.60$ and 3.44 , respectively).

Table B26. Please rate the value of different aspects of interactions with your Disciplinary Commons peers

	N/A	Not at all valuable	2	3	Extremely valuable	Mean	SD	n ¹³
Peer review of course portfolio content	1 (5.9%)	2 (11.8%)	5 (29.4%)	5 (29.4%)	4 (23.5%)	2.69	1.01	16
Plenary discussions	1 (5.9)	0 (0.0)	1 (5.9)	7 (41.2)	8 (47.1)	3.44	.63	16
Structured activities/exercises	0 (0.0)	0 (0.0)	5 (29.4)	9 (52.9)	3 (17.6)	2.88	.70	17
Informal interactions in small groups	2 (11.8)	0 (0.0)	1 (5.9)	4 (23.5)	10 (58.8)	3.60	.63	15
Peer observation of teaching	1 (5.9)	0 (0.0)	1 (5.9)	9 (52.9)	6 (35.3)	3.31	.60	16
Email exchanges	3 (17.6)	1 (5.9)	4 (23.5)	7 (41.2)	2 (11.8)	2.71	.83	14

As shown in Figure B27, U.S. and U.K. Disciplinary Commons participants’ responses to the question of how much they valued different aspects of interactions with their Disciplinary Commons peers were relatively similar. U.K. participants valued plenary discussions more than U.S. participants but this difference was not statistically significant.

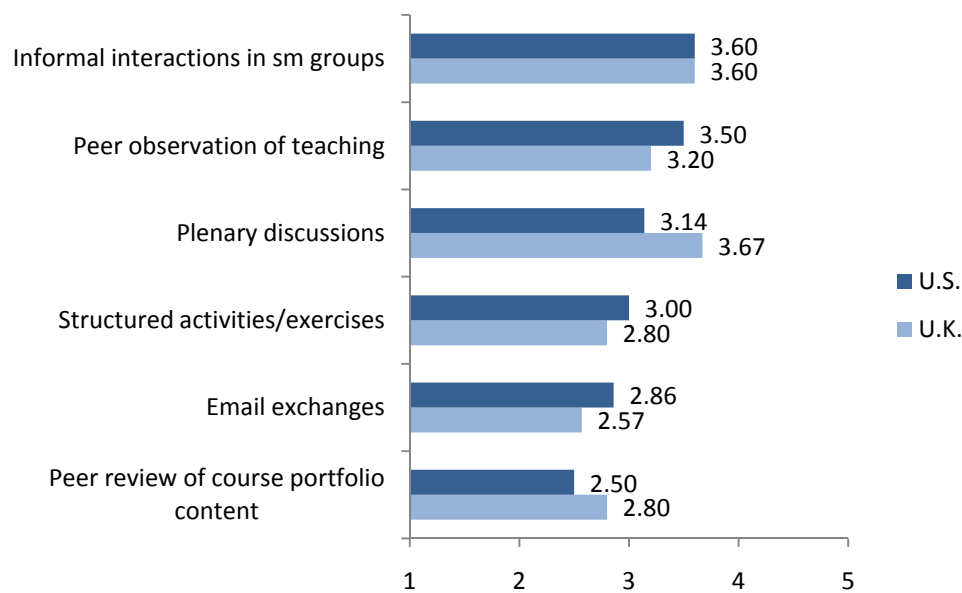


Figure B27. Comparison of U.S. and U.K. Disciplinary Commons participants’ mean responses to the question of how much they valued different aspects of interactions with their Disciplinary Commons peers

¹³ Means do not include “N/A” responses.

Participants were asked to rate, on a scale from 1 “Strongly Disagree” to 5 “Strongly Agree”, how much they agreed or disagreed with a series of statements about their interactions with other Disciplinary Commons participants. As shown in Table B27, respondents were in strong agreement that participants were willing to share their perspectives even when they differed from each other and they learned about other participants’ perspectives during the course of the year ($M_s = 4.82$). Furthermore, participants did not report holding back their own opinion to avoid conflict ($M = 1.47$, between “Strongly Disagree” and “Disagree”).

Table B27. Please indicate how much you agree or disagree with the following statements about your interactions with other Disciplinary Commons participants

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	SD	n _{Mean}
	1	2	3	4	5			
In general, participants were willing to share their own perspectives even if they differed from each other.	0 (0.0%)	0 (0.0%)	0 (0.0%)	3 (17.6%)	14 (82.4%)	4.82	.39	17
During the year, I learned about other participants’ perspectives.	0 (0.0)	0 (0.0)	0 (0.0)	3 (17.6)	14 (82.4)	4.82	.39	17
I felt comfortable expressing my perspective in Disciplinary Commons sessions.	0 (0.0)	0 (0.0)	0 (0.0)	4 (23.5)	13 (76.5)	4.76	.44	17
At times, I held back my own opinion to avoid conflict.	10 (58.8)	6 (35.3)	1 (5.9)	0 (0.0)	0 (0.0)	1.47	.62	17
I believe the feedback I received in peer review of portfolio content was honest.	0 (0.0)	0 (0.0)	5 (29.4)	6 (35.3)	6 (35.3)	4.06	.83	17
Occasionally, the feedback I provided on portfolio content was not as incisive as it could have been because I did not want to be too harsh.	3 (17.6)	5 (29.4)	6 (35.3)	2 (11.8)	1 (5.9)	2.59	1.12	17
I plan on staying in touch with my Disciplinary Commons cohort.	0 (0.0)	0 (0.0)	4 (23.5)	6 (35.3)	7 (41.2)	4.18	.81	17

Figure B28 shows U.S. and U.K. Disciplinary Commons participants’ responses to the question of how much they agree or disagree with a series of statements about their interactions with other Disciplinary Commons participants. By and large, mean responses were quite similar and there were no significant differences.

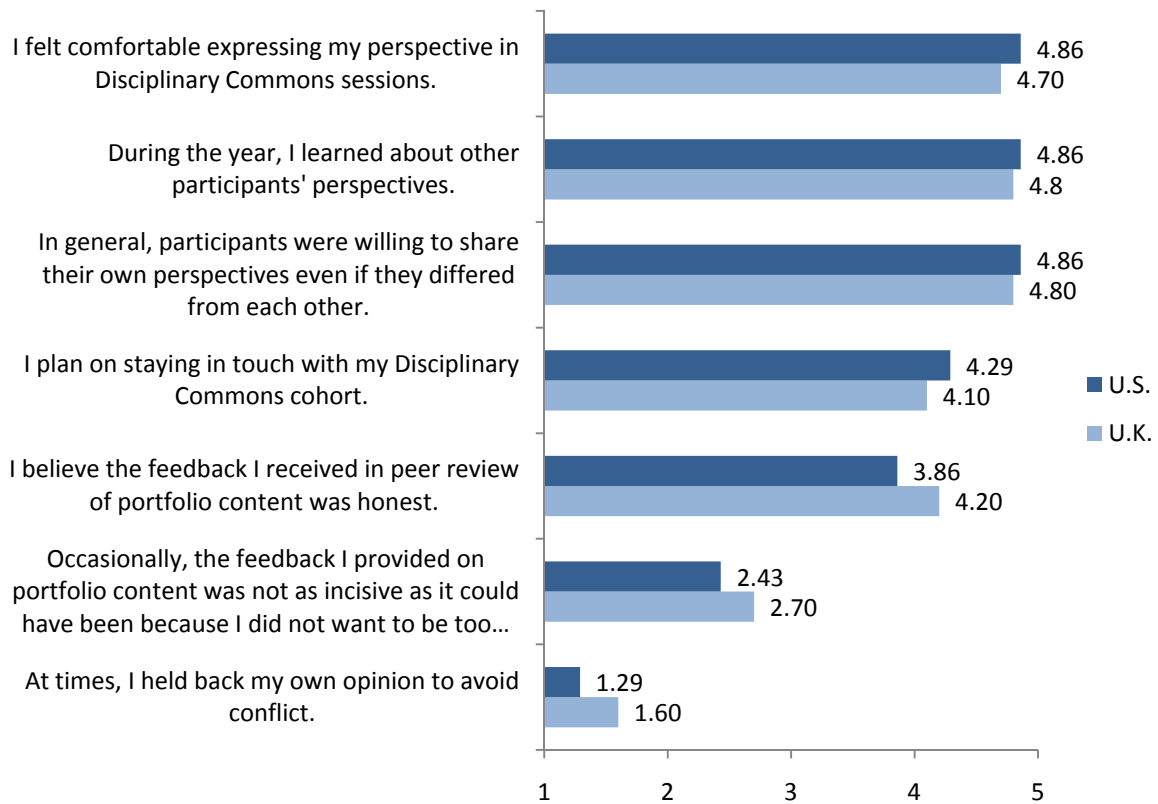


Figure B28. Comparison of U.S. and U.K. Disciplinary Commons participants' mean responses to the question of how much they agree or disagree with a series of statements about their interactions with other Disciplinary Commons Participants

Next, participants were asked to describe any important connections that they made between other participants' insight, perspective, or experience and their own teaching practices and 12 participants offered a response. Participants provided varied responses that are included verbatim in Table B28.

Table B28. Please describe any important connections you made between other participants' insight, perspective, or experiences and your own teaching practices.

U.S. Responses

Student interaction / motivational techniques using different evaluation techniques.

Just the idea of test-first teaching.

I have started research collaboration on the teaching of software engineering with a Commons member. This research benefits from the work with the Commons.

Using some of the ideas used in teaching the course using a bottom-up approach. This could be valuable to students who have difficulty in connecting the dots.

U.K. Responses

The varied nature and importance of the role of the teacher in the learning process.

On instructional design & delivery - there appears to be a wide range of issues in balancing theoretical content vs. practical work (skills-based learning) in courses and whether it was an personal/tutor's choice or an institutional guideline
Peer assessment.

See answer to q12!

The difference between the approaches of [two other participants], and I - all modules in 2nd year, following an previous year introduction, exploiting the students' knowledge to develop their abilities - yet completely different.

Some very good approaches to teaching SQL concepts which I plan to adopt; a need to review how we handle evaluation compared to other participants.

We all have similar problems.

Evaluation of a programme's module results.

Next, participants were asked for what purpose, if any, might they contact members of their Disciplinary Commons cohort in the future. As shown in Table B29, participants were most likely to mention that they would contact members of their cohort for purposes of teaching collaboration (78.6%) or journal submissions, conference submissions or grant applications (57.1%).

Table B29. For what purpose, if any, might you contact members of your Disciplinary Commons cohort in the future?

Purpose	Frequency/Percentage ¹⁴
Teaching collaboration (e.g., seek advice, share ideas)	11 (78.6%)
Journal/Conference presentations; Grant applications	8 (57.1)
To find out about "outcome of the Commons"	1 (7.1)
When looking for SE faculty to hire	1 (7.1)
Keep in touch with friends	1 (7.1)
Workshops	1 (7.1)
Implement a student project across institutions	1 (7.1)
Not sure	1 (7.1)

Section 4: Evaluation

This section of questions focused on participants' Disciplinary Commons experience. As Table B30 indicates, participants enjoyed their Disciplinary Commons experience and were in strong agreement that their decision to take part in Disciplinary Commons was a good one ($M_s = 4.71$ and 4.41 , respectively or between "Agree" and "Strongly Agree"). Participants were less likely to agree that their participation in the Disciplinary Commons advanced their career ($M = 3.18$, on average, "Neutral").

Table B30. Please indicate how much you agree with the following statements about your Disciplinary Commons experience.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	SD	n _{Mean}
	1	2	3	4	5			
As a whole, I enjoyed my Disciplinary Commons experience.	0 (0.0%)	0 (0.0%)	0 (0.0%)	5 (29.4%)	12 (70.6%)	4.71	.47	17
I think my decision to take part in the Disciplinary Commons was a good one.	0 (0.0)	1 (5.9)	1 (5.9)	5 (29.4)	10 (58.8)	4.41	.87	17
Being a part of the Disciplinary Commons was a positive addition to my CV.	0 (0.0)	0 (0.0)	3 (17.6)	6 (35.3)	8 (47.1)	4.29	.77	17
The reflection on my teaching that I did as a Disciplinary Commons participant was well-integrated into my career goals.	0 (0.0)	2 (11.8)	4 (23.5)	8 (47.1)	3 (17.6)	3.71	.92	17
I believe that my participation in the Disciplinary Commons advanced my career.	1 (5.9)	2 (11.8)	9 (52.9)	3 (17.6)	2 (11.8)	3.18	1.02	17
At this point, I consider participation in the Disciplinary Commons a good use of my time.	0 (0.0)	1 (5.9)	1 (5.9)	6 (35.3)	9 (52.9)	4.35	.86	17
During the Disciplinary Commons, I learned more about how to assess student learning than I had known before.	2 (11.8)	1 (5.9)	4 (23.5)	5 (29.4)	5 (29.4)	3.59	1.33	17

Figure B29 shows comparisons between the two cohorts (U.S. and U.K.) for the items in the table above. U.S. and U.K. responses were quite similar and there were no significant differences.

¹⁴ Since participants responses were coded according to more than one category, percentages will exceed 100%.

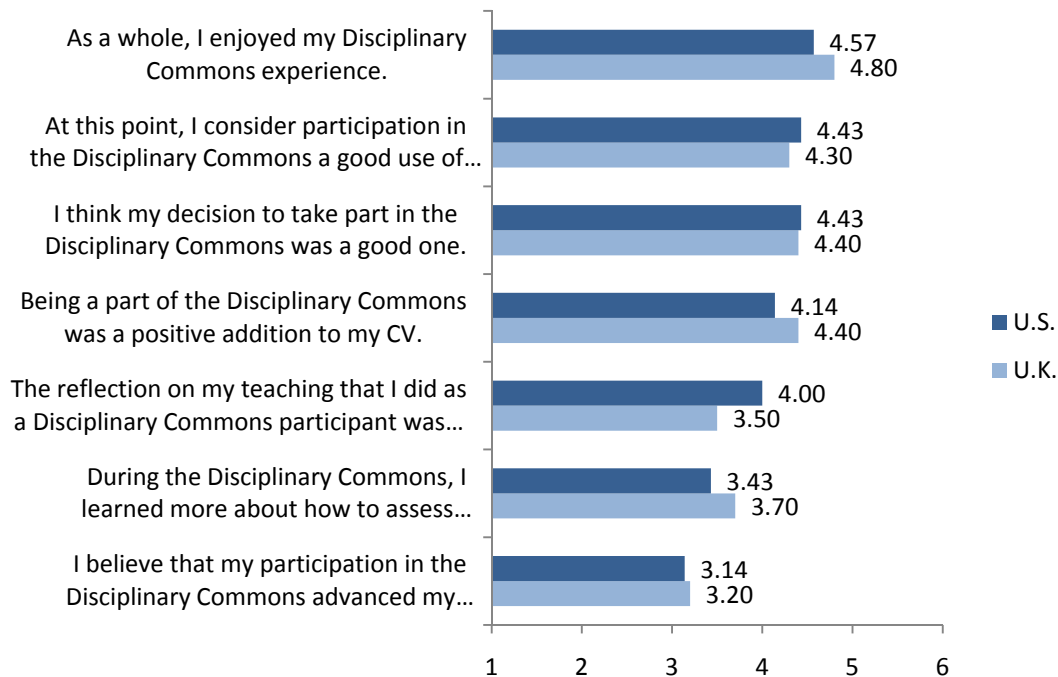


Figure B29. Comparison of U.S. and U.K. Disciplinary Commons participants' mean responses to a series of questions about their Disciplinary Commons experience

Finally, participants were asked to rate a series 13 aspects of the Disciplinary Commons on a scale from 1 "Poor" to 5 "Excellent." The facilitator's contribution to Disciplinary Commons and effectiveness in guiding discussion received high ratings (between "Very good" and "Excellent"). Online materials received the lowest mean ratings ($M = 3.44$); nevertheless, it is important to note that the mean fell between "Good" and "Very good."

Table B30. Please rate the following aspects of Disciplinary Commons

	Poor	Average	Good	Very Good	Excellent	Mean	SD	n _{Mean}
	1	2	3	4	5			
Level of organization	0 (0.0%)	2 (11.8%)	5 (29.4%)	7 (41.2%)	3 (17.6%)	3.65	.93	17
Coherence across sessions	0 (0.0)	3 (17.6)	6 (35.3)	4 (23.5)	4 (23.5)	3.53	1.07	17
Logical sequence of sessions	0 (0.0)	0 (0.0)	8 (47.1)	4 (23.5)	5 (29.4)	3.82	.88	17
Relevance of assignments to sessions	0 (0.0)	1 (5.9)	7 (41.2)	2 (11.8)	7 (41.2)	3.88	1.05	17
Appropriateness of assignments	0 (0.0)	2 (11.8)	6 (35.3)	2 (11.8)	7 (41.2)	3.82	1.13	17
Relevance of readings to sessions	1 (5.9)	1 (5.9)	7 (41.2)	3 (17.6)	5 (29.4)	3.59	1.18	17
Appropriateness of readings	0 (0.0)	3 (17.6)	5 (29.4)	4 (23.5)	5 (29.4)	3.65	1.12	17

	Poor	Average	Good	Very Good	Excellent	Mean	SD	n _{Mean}
	1	2	3	4	5			
Overall structure of the program	0 (0.0)	2 (11.8)	4 (23.5)	6 (35.3)	5 (29.4)	3.82	1.02	17
Online materials	1 (6.3)	3 (18.8)	3 (18.8)	6 (37.5)	3 (18.8)	3.44	1.21	16
The facilitator's contribution to the Disciplinary Commons	0 (0.0)	0 (0.0)	3 (17.6)	5 (29.4)	9 (52.9)	4.35	.79	17
Use of session time	0 (0.0)	0 (0.0)	6 (35.3)	4 (23.5)	7 (41.2)	4.06	.90	17
Facilitator's effectiveness in guiding discussions during Disciplinary Commons sessions	0 (0.0)	0 (0.0)	3 (17.6)	7 (41.2)	7 (41.2)	4.24	.75	17
Disciplinary Commons overall	0 (0.0)	0 (0.0)	4 (25.0)	5 (31.3)	7 (43.8)	4.19	.83	16

Figure B30 illustrates mean responses for the items from the table above for U.S. and U.K. participants separately. There were no significant differences between U.S. and U.K. responses in regard to any of the aspects. However, U.K. participants rated the facilitator's effectiveness in guiding discussions during Disciplinary Commons sessions marginally higher than U.S. participants.¹⁵

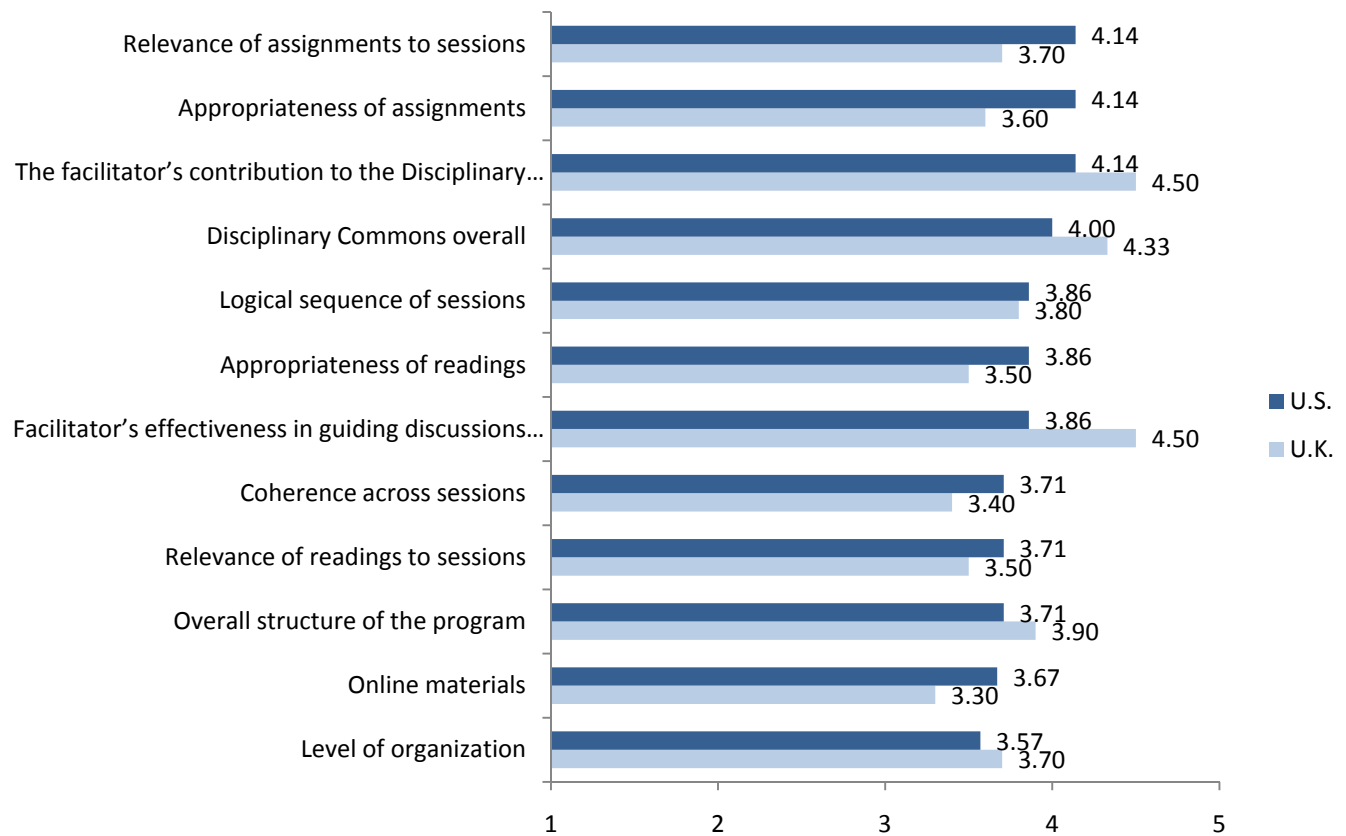


Figure B30. Comparison of U.S. and U.K. Disciplinary Commons participants' mean responses to ratings of a series of aspects of Disciplinary Commons

¹⁵ Independent Samples t-test $t(15) = 3.15, p < .10$.

Closing out the post-survey, participants were asked three open-ended questions. First, they were asked how, if at all, the Disciplinary Commons program could be improved and 13 participants provided a response. Two participants said they had no suggestions. The remaining participants provided a wide array of suggestions including having more flexibility in the structure of the portfolios and choosing a more diverse group of people and/or courses for the Disciplinary Commons program. See Table B32 for all responses verbatim.

Table B32. How, if at all, could the Disciplinary Commons be improved?

U.S. Responses
I think it is very dependent on those attending.
Overall, it is very good and I cannot think of anything I would suggest.
No suggestion at the moment.
A set of template forms and more exemplars would make the journey less daunting for new faculty.
Since we have a course-sequence rather a single course, more time could be allocated to examine teaching issues and reflections. Also, the Commoners' experience could be shared in educators conferences.
It must be well planned and executed. Choose a more diverse (in terms of course content) group of people/courses.
U.K. Responses
I think there ought to be more flexibility in the structure of the portfolios.
Cut down travelling - perhaps run two-day workshops (Thu-Fri, 10-4) once every two months?
Timing is not so good for me at least. The May/June period is particularly difficult as a result of exams, exam boards etc. It might be better to aim to finish at the end of April.
Unsure. Could past portfolios be presented in something akin to scientific conferences? I wish I had been able to have more of the portfolio, earlier.
At the initial session, overview previous portfolios and discuss what it required; it took a while for this to sink in for me.
Look very carefully into the draft feedback sessions. Having 3 would be very valuable - if there were drafts to consider, and if they evolved from one session to next. Perhaps if drafting a section at a time had been set as the homework from the outset, and if feedback criteria had been discussed during the prior meeting, this would have worked much better.
More attention to publishing materials on cue. it would keep the momentum going.

Next, participants were asked to provide any comments and/or constructive feedback specifically for the Disciplinary Commons facilitator and 11 participants offered a response. There was much praise for the facilitators along with helpful comments and suggestions. See Table B33 for all unique responses in their entirety.

Table B33. Please provide any comments and/or constructive feedback specifically for the Disciplinary Commons facilitator.

U.S. Responses

I would hope it is possible for the group to continue with some follow-up work. Such activities could include having Commoners visit other Commoners' institutions and serve as guest lecturers on software engineering topics on which the visiting Commoner may be more knowledgeable than the host Commoner.

Fantastic job done. I am impressed with the facilitator's presentation and coverage of the material, and the manner in which the sessions were managed.

Thank you for all your hard work and flexibility.

[The facilitator] was going through several transitions (at least two major ones) during the past year. In spite of that he handled his role very effectively. Ours is a very diverse group. He used a very flexible approach but at the same time retaining the focus and the purpose of the Commons. Certainly we all benefited from his leadership.

U.K. Responses

I enjoyed the facilitator's approach for the most part, but it would have been interesting to have more input from her in some of the activities, and perhaps a little more feedback.

It was not clear what was needed at the beginning but this slowly improved. Overall I found the experience very worthwhile. Thanks for the considerable effort that went into organising the programme.

[The facilitator] did an excellent job. Thank you for putting this together.

Thanks!

Excellent program; my only comment is that I would have preferred the meetings to be in the same venue or in 2 alternating venues - organising travel was a hassle. A follow up session for debriefing 6 months down the road would be very useful.

I would have preferred reading to also be available online. Guidance for peer observation did not appear until it was far too late to use. See also Q20.

As above in 20 though i am not sure how you can force people to submit.

Finally, participants were asked whether they had any additional comments and five participants provided responses. Three comments offered praise for the program. As one participant said:

I very much enjoyed the overall experience, though it was sometimes exhausting, and [I] will be encouraging colleagues to participate in future projects.

One participant expressed some concerns regarding the ability of participants to commit fully to the program. She/he said:

Somewhat ironically, the process is a reflective one (great!). But I felt no one has the time for this luxury in education anymore, hence people not turning up, not publishing work and not feeling totally engaged at each meeting. However, no regrets on the experience.

Finally, one participant commented on the value of the community formed by the Disciplinary Commons experience. She/he stated:

The peer assessment paper would not have happened without the Disciplinary Commons meetings. None of the authors knew each other nine months ago!

APPENDIX C: DETAILED FINDINGS, PRE- AND POST-ADOPTER INTERVIEWS

I. Adopter Pre-Interviews

1. Motivation

a) How did you hear about Disciplinary Commons?

The U.S. adopter indicated that he had worked with Sally and Josh first as a student and then as a colleague. His first exposure to Disciplinary Commons came when Sally and Josh were presenting research results at a conference. The U.K. adopter explained that one of his colleagues had worked in a previous Disciplinary Commons that Sally had led and, subsequently, he spoke with Sally at a conference regarding the possibility of doing the Disciplinary Commons with a database course.

b) What motivated you to conduct your own Disciplinary Commons?

The U.K. adopter explained that like programming, database courses are taught in all Computer Science departments and there are a “great variety of ways it can be taught.” He went on to assert that teaching a Disciplinary Commons on databases would be a way of “solidifying” a community surrounding the teaching of database courses. The U.S. adopter mentioned the opportunity to work with Josh and Sally and he added that he felt that Disciplinary Commons was “worthy of trying again.” Moreover, he noted that securing extra funding is a “good thing.”

c) When deciding whether to conduct your own Disciplinary Commons, how did you learn more about the project and your role?

The U.K. adopter explained that he met with Sally prior to conducting the Disciplinary Commons and the U.S. adopter explained that he wrote the grant proposal along with Josh. Both adopters indicated that even after these activities, they were not yet completely clear on the project and the role they would play in it.

d) Any information you wish you had when making that decision?

The U.S. adopter explained that he spent a lot of time with Josh up front gaining mostly a “high-level overview” of the program. He added that he could have benefitted from learning more about the details of what goes on at each session. He added that he did not anticipate the logistical planning that was part and parcel of the Disciplinary Commons experience (e.g., room reservations, catering). The U.K. adopter indicated that he may have received “more stuff” than he had time to look at. He added that it wasn’t until taking part in the Disciplinary Commons that he realized the structure of the course.

2. Recruitment

a) Can you tell me a little about the process you used to recruit your current set of Disciplinary Commons participants?

The U.K. adopter indicated that he primarily recruited participants from two database user groups within Britain- one a research group based on the British database conference and the other a teaching-oriented group led by the higher education academy. Since he had a difficult time filling the roster, Sally contacted heads of department in Computer Science in Britain to try to recruit more people. The U.S. adopter explained that he visited two regional conferences to spread the word about Disciplinary Commons but added that it did not generate many participants, “maybe one.” Instead, individual invitations were the chief means that participants were recruited and a few participants were garnered from “public announcements.” He went on to add that

some people wanted to take part in Disciplinary Commons but couldn't commit to attending the sessions on Saturdays.

b) How would you characterize the demand among your colleagues for a program like this?

The U.S. adopter said that he was surprised at how few people responded but added that those who did express interest were very "enthusiastic." When prompted as to why few people responded, he explained that, lately, there has been a "push towards publishing and external funding" in academia, marginalizing those who care about teaching. He went on to explain:

In general, [you] have a chance to come out of the closet and say I really care about teaching, don't care about my dean telling me I need a grant proposal.

He also suggested that those who come from teaching institutions (vs. research institutions) may not "get out" as much as those at research institutions (e.g., attending conferences) so they might not have heard about the program. The U.K. adopter was in agreement that the demand was not "great" but added that "a number of people would have been pleased to have been involved..." He went on to explain that he felt the commitment was high and pressure to focus more on research versus teaching is high at U.K. Universities.

c) Any recruitment techniques that seemed to work well? What do you think motivated your participants to commit to this program?

Only the U.K. adopter responded directly to this question. He explained that those who decided to take part in the program are all "strongly motivated." He added that the group quickly realized that they had a lot in common "career-wise," explaining that most of the participants "did not envision their life being a University lecturer, not the standard academic career things."

d) Any challenges you encountered during recruitment? What about concerns that potential participants expressed?

The U.S. adopter mentioned that day of the week was really the main challenge that he encountered when trying to recruit people for the program. However, he went on to explain that the ability to recruit people is a vital skill for a Disciplinary Commons leader and added that it was not his "favorite thing" to do. The U.K. adopter added that convincing potential participants that the time commitment was not too substantial was a challenge as was the specific day of the week for some people.

e) Is there any support that would have helped make recruitment more effective or easier for you?

The U.K. adopter mentioned that it might have been nice to have a complete database of all British lecturers and what they teach. The U.S. adopter was unsure but added that he felt that it was necessary for the Disciplinary Commons leader to do the recruiting (as opposed to anyone else) otherwise it wouldn't be as "genuine."

3. Preparation

a) Before the Disciplinary Commons began, what kind of course preparation did you do?

Only the U.K. adopter was asked this question directly, adding only that he was unable to do as much preparation as he would have liked to have done during the summer prior to the Commons. The U.S. adopter previously explained that he met with Josh a fair amount prior to the Commons to discuss the philosophy of the program and its overarching goals.

b) How much time would you say you invested before starting the first session?

Only the U.S. adopter was asked this question and he broke down the time investment into four parts. First, in terms of recruiting, he estimated a total of about 5-6 days or 40-60 hours spent on this endeavor. Second, "preparation" took about 40-60 hours. Third, logistics (e.g., room reservations) took about 5-10 hours up-front. Finally, creating a web presence took an estimated 10-20 hours and the amount of time he has spent updating and maintaining that presence has doubled since then. When asked whether anything would have helped as they were preparing for the Disciplinary Commons, neither adopter had anything to add.

c) How about on a session-to-session basis - what kind of preparation did you do?

The U.S. adopter said that he would look at what had been written as a plan for prior commons adding that would "lean on that pretty heavily." However, he would also review what had happened in the previous session and decide whether to prepare or adopt presentation materials. The U.K. adopter only said that Sally had prepared a plan for the next commons and he was taking care of "preparations for location" such as photocopying materials.

d) Approximately how much time is required to prepare each session?

The U.S. adopter indicated that it probably took him about 15-20 hours to prepare for each meeting and perhaps twice that much for the initial meeting and the U.K. adopter stated that it took "several hours for each day."

e) Anything that would help you prepare for each session?

The U.S. adopter indicated that having the "record of the prior commons" was extremely helpful adding that he would look at what Josh and Sally did individually, assess how well things worked, and "figure out what would work best" for his audience. The U.K. adopter mentioned that setting up a web site for people to write into would have been the "main thing" that would have helped him to prepare.

4. How is it going?

a) In general, how is it going so far?

The U.S. adopter said that the first phrase that came to mind was "surprisingly well." He went on to explain that he just wasn't sure how things would go and, given that the individuals are engaged and making unique contributions to the group, he concluded that "recruiting the right people is what makes it work." The U.K. adopter had similar things to say, adding that participants were "highly motivated" and very open to sharing their experiences and, overall, he felt that it was going "very, very well."

b) At this point, how would you describe your role in the Disciplinary Commons?

The U.K. adopter indicated that he was "gradually" taking on more responsibility adding that he felt "more in control." However, he went on to state that it was still a very "collaborative exercise." The U.S. adopter indicated that his role was what he expected but a bit less work than he had initially thought. He elaborated, stating that the group creates "never-ending" conversation which is great but leads to the problem of moving from one topic to the next.

c) Have you had the opportunity to reflect on how it's going, on your own? What about with others?

The U.K. adopter indicated that he had been doing some reflection "on the way home" not focused on how to fix problems but more general reflection on what he has learned from others and what he does. The U.S.

adopter stated that he and Josh have talked on the phone for about an hour after each of the Commons meetings thus far. Moreover, he said that he has also spent some time talking with a professor at Georgia Tech who is currently running a Commons that is funded by Georgia Tech.

d) Have you received any feedback from participants on how it is going or how it might be improved? Do you have any mechanisms for gathering this type of feedback?

The U.K. adopter indicated that nothing has materialized quite yet, adding that it “may be too early in the year.” He noted that things might begin to emerge in the coming session. The U.S. adopter said that he had given participants a 3-item open-ended anonymous paper survey at the end of the second meeting. He said that the number one thing that participants wanted was a detailed agenda for the meetings. He has started offering them a “sketch of a meeting” at the beginning but has not had feedback since. Overall, he added that participants seemed to be happy with the Commons thus far as evidenced by their attendance, engagement and willingness to complete homework.

e) What, if anything, would you say has been most rewarding so far?

When asked what, if anything, they would say has been most rewarding so far, the U.K. adopter said that it was the sense of “communality.” More specifically, the opportunity to find out what others are doing and learn that everyone is facing the same sort of problems (e.g., “caught between the students and the administration”). The U.S. adopter echoed these comments, noting that he was benefitting from engaging in discussions about the “various thoughts and approaches to teaching software engineering.”

f) Any challenges you have experienced so far? Any lessons learned?

The U.S. adopter said that the number one lesson learned thus far was that “if you get the right people together, the commons runs itself,” expressing the sentiment that he has had to spend less time being a “leader” than he thought he would have had to spend. He went on to add that there had been some unforeseen logistical challenges (e.g., catering). The U.K. adopter stated that his only challenge was “finding enough time” to do a good job. However, he added that he doesn’t think the Disciplinary Commons is necessarily too time intensive but rather personal circumstances have not afforded him the time needed.

g) Have you made any changes in the materials so far? What led you to make these changes?

The U.K. adopter noted that he had made mostly “cosmetic” changes at this point adding that he had, for the most part, adopted Sally’s meeting plans. For example, he doesn’t call it homework but refers to it as “preparing for the next meeting.” He also said that he does more plenary session (i.e., full group discussion) as opposed to small group think/pair/share given that it is a smaller group. The U.S. adopter indicated that he hadn’t made many changes but “might be more proactive on that in the future.” He did report finding new reading material that fit with the topics of the Commons.

h) Anything that could have improved the process for you? Any support or assistance you would have liked or that would have helped?

The U.S. adopter replied that the opportunity to observe a meeting beforehand would have been helpful but he wasn’t sure whether that would have been logistically possible. He added that “getting that first-person experience of what a meeting is like would have helped orient/prepare, etc.” The U.K. adopter mentioned that an “easier networking structure” (e.g., web site) for all Disciplinary Commons programs would make it easier to share ideas and discuss problems.

5. Looking ahead

a) Looking ahead, what are you most looking forward to in the remaining Disciplinary Commons sessions?

The U.K. adopter said that he was looking forward to the opportunity to continue to reflect on his own teaching and document it formally. The U.S. adopter took this opportunity to discuss the upcoming peer observations. He said that he, personally, would like to observe someone else teaching but is not sure whether or not he would like to be observed. In addition, he mentioned that their group had some extra money (since nearly all participants are able to drive to meetings) so they will hold their March meeting in Milwaukee at a Computer Science education conference.

b) Any challenges you anticipate in the coming sessions?

The U.S. adopter mentioned that the current semester has been a particularly busy and challenging one (e.g., had to submit promotion and tenure materials, grant proposal, etc.) and he hopes that next semester will be less busy. The U.K. adopter said that he was concerned about the challenges posed by British weather.

c) Anything you think you might need coming up?

The U.S. adopter said that he could use some assistance with “mechanical logistical issues” including things like reimbursement and web updates. The U.K. adopter couldn’t come up with anything he might need but added that this is partly because he knows that “Sally is there.”

d) Looking further ahead, to what extent do you think any of your participants will become more involved in scholarly work on teaching and learning (e.g., attending conferences, publishing)?

The U.K. adopter noted that one of the participants is working on making the teaching network in Britain “more concrete.” He added that there is already a series of workshops but he/she got a grant to “make that a bit more solid.” The U.S. adopter was confident that they would see an increase in participant involvement in scholarly work on teaching and learning. He stated:

I think there is strong potential that everyone will consider being more involved in [the] education community whether publishing or participating in conferences, in general will see an increase in that activity.

e) Any potential future facilitators among your participants?

When asked this question, both facilitators indicated that there was at least one person that has the “skill set” to lead a Disciplinary Commons but whether or not they had the time was another question.

f) Any additional comments about Disciplinary Commons?

Neither adopter had any substantive comments to add. The U.K. adopter said that he was “pleased to be involved in it” and the U.S. adopter advised against running a Commons and coaching volleyball in the same semester.

B. Adopter Post-interviews

1. How did it go?

a) In general how did it go?

When asked, in general, how did it go, the U.K. adopter indicated that the Disciplinary Commons went extremely well and he added that “everyone was very positive about the experience.” The U.S. adopter took this opportunity to describe some unforeseen logistical problems resulting from two meetings that were cancelled due to snow and ice. He added that they tacked on additional time for participants to work on their portfolios, as opposed to replacing the meeting dates, and he felt that “it was sufficient” given the quality of their work. He went on to describe how he felt his Commons might have proceeded differently from those run by Sally or Josh. He explained:

My group of participants were very enthusiastic and quick to volunteer...30 minutes discussion easily become 45 minutes to an hour and ended with 2-3 agenda items still needing to be addressed—it went somewhat unexpectedly. I had the idea that meetings would follow the agenda but the discussions were all relevant and enthusiastic....

Moreover, the U.S. adopter went on to state that he was quite impressed with the quality of the portfolios and at the final meeting, most participants exceeded the 15-minute time period that he had allotted for them to discuss their portfolios. When prompted to elaborate on why he felt that participants were so engaged, he said:

I feel like software engineering is frequently something that is shoved into a degree program and teachers are passionate but usually only one or two people per institution- so the opportunity to get together with others who are passionate about teaching software engineering was very valuable.

In addition, he mentioned that introductory courses are more commonly examined whereas Junior or Senior level classes are often given little attention in the research literature. The U.K. adopter explained that, at this point, he has had little time to reflect on the Commons but expected to do doing some reflection soon. However, he mentioned that he gave an invited talk about the Commons at an annual workshop on database teaching adding that there was a lot of interest at the conference.

b) Did you receive any feedback from participants on how it went or how it might be improved? If so, how did you collect this information (formally or informally)?

The U.S. adopter reported that no one vocalized any feedback directly to him. He explained that he gave participants a written survey at the end of the Commons and received several suggestions for improvement/comments including pushing the participants to work harder, having more diversity in the group and continuing the group beyond the time allotted. The U.S. adopter went on to explain that his biggest challenge was finding the time to be present for meetings and he could have “benefitted from stronger clerical help.” He did add that Sally and Josh were available if he needed their counsel but the “bigger challenge was finding the time” to consult them.

The U.K. adopter indicated that participants really did not have any specific suggestions for improvement but that everyone struggled to find adequate time to dedicate to the Commons. He added that “much less” peer review was accomplished explaining that less than 50% were able to give “substantive feedback.” The U.K. adopter added that he felt having the Commons at a different location each time gave different people the opportunity to have ownership making them “more engaged when they had to host.” Finally, he explained that

his work load made it difficult for him to dedicate as much time as he would have liked to the Commons and lauded Sally for her assistance and support with the endeavor.

2. Outcomes

Both the U.K. and the U.S. adopters reported that all participants stayed through the end of the Commons and attendance was generally very good with the exception of times when weather was bad. Whereas the U.S. adopter had noted earlier in the interview that participants were very successful in completing their portfolios, the U.K. adopter indicated that completion was mixed with his group, adding that there were “commonalities and differences” in terms of how complete the portfolios were. Nevertheless he said that all but one participant had a “deliverable” product at the final meeting.

The U.S. adopter explained that it was hard to pin down what was “most valuable” about the Commons but added that the participants “highly valued” peer observation, portfolio instruction and networking in the commons.

a) In general, what would you say was the most valuable part of Disciplinary Commons for participants?

When asked to identify the most valuable part of Disciplinary Commons for participants, the U.S. adopter reported that it would be difficult for all participants to agree upon a particular aspect but noted that they enjoyed the peer observation, networking, and portfolio construction. The U.K. adopter reported that the opportunity for like-minded individuals to get together and discuss their teaching was the most valuable aspect of the Commons.

b) How would you characterize the quality of the discussions during your Disciplinary Commons sessions? Any specific conversations that stand out in your memory as particularly fruitful or valuable?

The U.K. adopter reported that discussion was “very lively” and everyone “contributed a great deal.” He added that the group had a great deal in common given that nearly everyone had “a sort of roundabout experience” in terms of how they got into teaching and thus they “respected each other from the word go.” The U.S. adopter had a similar experience with his group, explain that nearly three-quarters of the time it was an open-group discussion in which everyone participated and offered “relevant” input. He added that the group was very interested in how topics in a basic software engineering course are sequenced. Currently, participants are working on submitting a paper on this topic with only minimal help from the Commons leader.

c) From your perspective, how effective was the Disciplinary Commons in encouraging your participants to reflect actively on their teaching practices? Does any specific evidence of this reflection come to mind?

Both adopters felt that the Disciplinary Commons was very effective in encouraging participants to reflect on their teaching practices. The U.S. adopter explained, stating:

The reason is that we forced them to take time to think about what they do. [This was] especially true in the peer observations...and the portfolios were clearly about the participant documenting their thought processes.

The U.K. adopter indicated that as the Commons went on, “everyone talked more about why we do things.” In terms of specific evidence of reflection on teaching practices, he cited one of his colleagues who likened programming in multiple languages to juggling.

When asked to what extent participants shared teaching practices during the Disciplinary Commons discussions, the U.S. adopter indicated that some participants incorporated others’ teaching techniques into

their final portfolios. The U.K. adopter stressed the eclectic nature of the group (e.g., different teaching styles, types of students) but added that “everyone learned something from someone.”

Both the U.S. and the U.K. adopter reported that the cohesiveness of their respective groups grew throughout the Disciplinary Commons experience. The U.S. adopter explained that there had been some discussion among his group regarding future meetings but he was not sure whether this would happen because the individual who was spearheading the plan had moved to another institution out of the area. The U.K. adopter said “there is a keenness to have some continuation of the process,” but added that they “definitely need support.”

3. Looking ahead

When asked whether, given the opportunity, they would facilitate another Disciplinary Commons, the U.K. adopter said “yes,” but added that he is retiring next fall. The U.S. adopter said that he had “vacillated” on the decision given his current work load but said that he would consider it if his work load decreased. He went on to explain that the subject matter of the Commons “makes a difference” for him explaining that he cares a great deal about software engineering but might not be as excited about a Commons on a different topic. Moreover, he added that he would be more apt to facilitate another Commons if the logistical issues could be mitigated (e.g., food, room reservations) and the burden of recruiting participants could be removed.

The U.K. adopter indicated that he would likely keep in touch with Disciplinary Commons participants through teaching workshops and added that he felt the participants, at least a subset, would keep in touch with each other. The U.S. adopter said that he would “definitely” stay in touch with his participants in the “near term” as they are working on a paper together. However, “further out” he was not sure as to whether they would keep in touch. The U.S. adopter took this opportunity to report that one of the participants is working to organize an “International Disciplinary Commons” with people in Malaysia and other Asian countries based less on the teaching portfolio and more on reflective teaching practices in general. He noted that the individual is currently trying to get funding for the group and has invited all of the current Disciplinary Commons participants to be part of the new endeavor.

When asked whether there were any future facilitators in the group, the U.K. adopter simply stated that he was not sure. The U.S. adopter answered “yes and no,” adding that there are people who have the skills (e.g., social, leadership) to facilitate a Commons but they might not be completely on board with the focus on the Commons as it stands. He explained more fully:

I'm not sure that they are all heavily bought into the portfolio as a central discussion point...I think it would primarily revolve around sharing practices with less reflection, more a case of here is how I approach this particular topic...

4. Any additional comments about Disciplinary Commons?

The U.S. adopter took this opportunity to explain that he felt the Disciplinary Commons was more work than he expected, namely because of the logistical issues (e.g., dealing with catering, reimbursements) adding that “what goes on behind the scenes amount of work was more work than it should have been, it was something I had not bargained for.” The U.K. adopter added that one of the Disciplinary Commons participants recently secured a new, more prestigious job at a University and added that “his work through the commons could not have had a bad effect.”