INFLUENCE OF REDUCED SEAT TIME ON SATISFACTION AND PERCEPTION OF COURSE DEVELOPMENT GOALS: A CASE STUDY IN FACULTY DEVELOPMENT

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ABSTRACT

This paper describes the redesign of a faculty development program at a large public university that transitioned from weekly face-to-face meetings to a version that reduced seat time by half. Focus is on course development activities in which individual faculty began designing and developing their online courses. Survey data was collected and analyzed from two "pre-revision" and two "post-revision" versions of the faculty development program to assess the satisfaction with the course and perceptions about faculty course development progress. Results indicate that faculty expressed a higher overall satisfaction with the "post-revision" program and expressed stronger perceptions about their ability to develop their online courses. This is attributed to three reasons; first, there was a balance of autonomy and support; second, an emphasis on adult learning principles to support content creation; and third, a shift from individual to community. Implications for practice are shared and recommendations for future research are proposed in the conclusion.

KEYWORDS

blended learning, e-learning, adult learner, distance learning, professional development, faculty training, faculty satisfaction

I. INTRODUCTION

In the past decade, the field of education has been transformed by the proliferation of technology tools used to support teaching and learning [1]. Not only are there more tools available, primarily through the Web, but the tools enable the principles being stressed in teaching and learning: a focus on student-centered and directed experiences. In addition, there is an exponential increase in both online and blended courses in higher education [2]. These two developments are markedly changing the landscape of educational opportunities for both teachers and students. From a faculty perspective, these academic and technological developments can be perceived as quite challenging [3]. Faculty members are now being expected to teach online and blended courses, which typically means being proficient with the school's learning management system, among other tools [4]. Essentially, they are being asked to restructure their teaching practices [5]. For these reasons, faculty support is crucial [4].

Because of these challenges, there is a need for professional development to train and support faculty to teach online and blended courses. This development goes beyond simple teaching of technical skills, and also addresses pedagogical needs such as using technology effectively to support learners in innovative practices [6]. Effective faculty development serves to improve instructional practices [7], course design, pedagogical methods, and awareness and proficiency with technological tools [8]. However, the ways in which faculty members learn in professional development is still being explored in research [7].

The always-changing technological landscape in education presents a challenge to instructional designers and other faculty educators [4]. Faculty members require multiple kinds of support, such as technical and pedagogical. In addition, faculty members have diverse need; they teach varying subject matters, possess

widely varying levels of technical skill, and manage various course loads [9]. Supporting all of these faculty members in a single faculty development program is a significant challenge.

II. HISTORICAL BACKGROUND

A. Global Trends

Upon review of the existing literature, three trends emerge as significant when considering how faculty development has evolved in higher education: (1) shift from individual to community; (2) shift to blended format; and (3) emphasis on adult learning theory principles.

There is a shift from the focus on the individual to the community as professional development evolves. From this view, the faculty member does not learn in isolation, but rather socially through a community of peers [4]. This allows members to interact and collaborate, sharing ideas and practices, and reflecting on outcomes [5]. Through this process, faculty members "co-construct knowledge about teaching and learning in the context of authentic activity" [5, p. 436]. It is expected that this community will provide support beyond the scope of the professional development course.

An increase in the number of blended student courses also encourages an increase in the number of blended faculty development courses [4]. Overall, blended courses have been shown to increase faculty's interaction with their students [10] and student achievement when compared to face-to-face (FTF) courses [11]. Critical thinking and student engagement are also fostered [12]. Evidence from educational research suggests that faculty will benefit from a blend of online and FTF professional development [4]. The blended format is advantageous since it is flexible, allowing faculty to interact in a FTF community, but also reflect on teaching practices online [13]. The online portion also is effective for supporting communities during times when they do not physically interact [4]. Also, reducing seat class time allows more convenience regarding factors such as time and location, which supports the growing demands of faculty [4, 12]. Although there are many touted advantages, blended learning in faculty development is still limited in research [12].

Another trend in faculty development over the years is the emphasis on adult learning theory, sometimes referred to as transformative learning. Some key elements of this theory include empowering participants, active participation, building on prior experience, and applying experience to professional fields [14]. In general, faculty members want to observe teaching practices being modeled and desire an active, rather than passive role in their own professional development [5, 9]. There is also an emphasis on self-regulated learning and independent use of strategies [5]. In addition, practice must be grounded in authenticity in order to be valued [5]. For these reasons, time is needed to prepare for the online teaching experience, resulting in a shift from a single workshop to a longer-term experience [9]. These elements help to inform future design of faculty development.

B. Faculty Development Course (IDL6543)

This research study focuses on IDL6543, Interactive Distributed Learning for Technology-Mediated Course Delivery, which is designed to focus on the special needs of faculty moving to the online environment. This non-credit course was first delivered in 1996, and it models how to teach online using a combination of seminars, lab projects, consultations, and Web-based instruction. Successful completion of IDL6543 is required to faculty wanting to design, develop, and deliver fully-online or blended Web-based courses at the University of Central Florida. The course is taught in a blended format and has won several awards for designing online course initiatives over the years.

Faculty members who have completed the course often refer to their experience as "transforming." Pedagogy, logistics, and technology skills involved with teaching online are discussed in great detail. IDL6543 requires a minimum of 80 clock hours to complete over a 10-week time period, culminating in a showcase event where participants demonstrate unique aspects of the course they designed.

Highlights of this intensive course include:

- Presentations and interviews with "Web Vets," faculty who have successfully completed

IDL6543 and are teaching online at UCF;

- Reflection and discussion of teaching strategies through small group interactions;
- Collaboration with peers and facilitators to design an online course consistent with best practice models;
- Formulation of student-centered learning objectives and desired course outcomes;
- Development of strategies for implementing learner support in online courses;
- Development of student interaction protocols for e-mail, discussions, etc.;
- Creation of content, assignments, activities, and assessment strategies for the online environment.

C. Need for Transformation

Although IDL6543 had been an overwhelming success in the years since its inception, it became apparent that the needs of the faculty were rapidly changing in response to the global growth explosion in online learning. This phenomenal growth accounted for 30.2% of student credit hours in blended, online, and video courses at the University of Central Florida in 2009 – 2010. Over 23,000 students enrolled in online or blended courses in Fall 2010, and in Fall 2011, that number was 25,328. This growth rate created a need to expand the program to reach increasing numbers of faculty and meet departmental needs for course offerings.

Many participants also demonstrated varying levels of experience with teaching, technology, and online familiarity. This made it increasingly difficult to conduct the development program in a way that effectively met the needs of all participants without leaving some behind, without creating frustration for those that were more advanced in their experiences. The participants, as faculty in a research university, had very demanding schedules that often made it difficult for them to attend the required FTF sessions one day per week.

Ongoing faculty feedback regarding the IDL6543 development program was requested through various forums including weekly and final evaluative surveys within IDL6543 each semester, as well as through communication between instructional designers and their assigned faculty. Due to this ongoing feedback from participants, the Center for Distributed Learning (CDL) began to conduct more formal communication with the Faculty Senate, the Faculty Center for Teaching and Learning, and other college or department meetings with faculty, deans, and chairs. These feedback sessions were designed to provide the faculty a venue for describing what they felt was needed in any online development program – an "in the trenches" type of viewpoint. The feedback received centered on the need for transformation of IDL6543 for these reasons:

- Growth and expansion needs of the university;
- Differential experience levels of faculty participants;
- Demanding faculty schedules that make it difficult to attend weekly sessions;
- Desire for developing their online course content earlier in the program;
- Desire to model a blended course in greater alignment with the university's policies on FTF and online attendance percentages;
- Desire for greater faculty independence, as adult learners, in the development of their online course.

Much of the feedback also supported the need for continuation of instructional designer support and relationship with the faculty, as well as the interaction provided by the small group activities. Armed with these faculty perspectives and their own observations over the years, the Instructional Design team proceeded with an aggressive agenda for transforming IDL6543 into a leaner, more focused, and adaptable faculty development program. The most significant change in IDL6543 was the shift from meeting FTF each week to one that reduced seat time, meeting just three times over the course duration.

D. Focus of this Article

Fulfilling the call for more blended faculty development research, this article will focus on the revisions to IDL6543 faculty development program, specifically in the area of reducing seat time. Reducing this time prompted the conversion of the traditional technical labs which were FTF to the Build Your Course Project (BYCP) which is fully online. This activity encompasses the 'course development' aspect of the program, where faculty members begin designing and developing their future online courses. In general, the specific revisions that were guided by faculty feedback will be described. Comparing differences in areas such as faculty satisfaction rates, content development, and technology usage between the former and revised IDL6543 programs will be studied for statistical significance and trend patterns.

III. THE BUILD YOUR COURSE PROJECT (BYCP)

The primary focus of IDL6543 is the Build Your Course Project (BYCP), a comprehensive, long-term activity that instructs faculty in how to design, develop, and teach courses online. The BYCP walks faculty through this process by having them author a single, complete module of online instruction that is hosted within the learning management system. The participants are taught how to format their documents, use the features of the learning management system, create pedagogically sound content, organize their modules, and import and link their documents.

In the original design of IDL6543 (termed "pre-revision"), participants could not begin working on their development modules until the fourth week of the program. The course development tutorials were thereafter presented in the online instruction as assignments nested within the weekly content. Hands-on technical lab activities were held each week during the FTF afternoon sessions in which participants would create course content, practice working with the tools of the learning management system, or experiment with emerging technologies for use in the course being developed.

In the re-design of IDL6543 (termed "post-revision"), all of the instruction is designed around the central theme of the BYCP. Tasks and assignments are presented incrementally beginning the second week, so that participants make constant progress in developing their course modules. While optional FTF labs are offered in the post-revision version to assist faculty, the instruction and the completion of the BYCP takes place online, reducing seat time. Examples of early assignments are developing the documents for the syllabus, protocols, schedule, and instructor introduction pages. Later assignments include creating lecture content, module objectives, activities, and assessments. Participants are encouraged to integrate graphics, audio, and/or video and to employ social media and gaming elements that enhance their instruction.

IV. METHODS

A. Demographics

Participant enrollments for IDL6543 are widely distributed throughout the University of Central Florida colleges. For this comparative study, a total of four program sessions were reviewed: Two sessions of the pre-revised IDL6543, and two sessions of the post-revised program. Each fall or spring session traditionally enrolled 30 participants, with 20 participants enrolled in summer sessions. Due to the demand for more online courses and trained instructors, enrollment in the Fall 2011 session increased to 40 participants. Table 1 reflects the college representations and completion rates in IDL6543 enrollment for the sessions indicated.

	Pre-Revision		Post-Revision		
College	**Fall 2010**	**Spring 2011**	**Summer 2011**	**Fall 2011**	**Total**
Arts and Humanities	6	5	3	8	22
Health and Public Administration	5	5	2	6	18
Nursing	3	1	1	1	6
Medicine	0	0	3	1	4
Sciences	8	10	4	12	34
Education	3	3	2	2	10
Engineering and Computer Sciences	1	2	1	2	6
Hospitality Management	3	2	3	5	13
Undergraduate Studies	1	1	0	0	2
Other	0	0	0	1	1
Total Completions for session	**30**	**29**	**19**	**38**	**116**

Table 1. Representation of colleges in IDL6543 sessions reviewed.

Just as there are variances in college representations, there are also differences in the years of teaching experience that each faculty participant brings with them into IDL6543. No data has been formally collected on teaching experiences prior to employment with the University of Central Florida, but Table 2 indicates the variance in participant years of experience since employment with the university commenced.

	Pre-Revision		Post-Revision		
Yrs at UCF	**Fall 2010**	**Spring 2011**	**Summer 2011**	**Fall 2011**	**Total Participants in Yrs of Experience**
0 – 5	17	16	8	30	**71**
6 – 10	9	4	6	3	**22**
11 – 15	2	7	2	1	**12**
16 – 20	2	1	0	1	**4**
21 – 25	0	1	0	1	**2**
26 – 30	1	0	1	2	**4**
Over 30	0	0	1	0	**1**

Table 2. Years of teaching experience at the University of Central Florida.

B. Data Collection and Analysis

This study compares faculty final evaluation survey responses two semesters before and after the Summer 2011 revision of the faculty development program IDL6543. Throughout the course, faculty participants are asked to complete surveys in which they provide feedback on the effectiveness of the instruction and offer suggestions on ways to improve it. The final evaluation surveys are made available to the faculty at the end of the course through the learning management system, with all faculty responses kept anonymous. The responses are reviewed by a team of instructional designers at weekly debrief meetings, to review trends and identify any areas of concern for ongoing course improvement. In the post-revision version, it was decided to make faculty completion of the final evaluation surveys mandatory, to ensure an optimal response rate. This was because the interim survey response rates were seen to decline as the course workload increased and participants faced greater demands on their time. The pre-revision response rate for the Fall 2010 semester was 25.8%, and for the Spring 2011 semester it was 34.4%. In the post-revision version, the response rate for the Summer 2011 semester was 84.2% and in the Fall 2011 semester, it was 81.6%.

In the pre-revision course, final evaluation surveys contained 24 questions, five of which were quantitative and 19 of which were open-ended. Separate sets of questions requested faculty feedback on the morning F2F lecture-based sessions and the afternoon F2F lab sessions. In the post-revision course, the final evaluation surveys reflect the changes brought about by the reduced seat time model, with its reduction in F2F time. The latter evaluation contained 15 questions, four of which were quantitative and 11 of which were qualitative. As the lab-specific survey questions were no longer relevant in the revised version of the survey, they were replaced with a set of targeted open-ended questions, to elicit more detailed feedback. Seven of the questions remained common to both versions of the survey, across all four semesters.

For the purposes of this study, six of the questions in the final evaluation survey were selected for comparison and analysis. The criteria for the selection of these questions was their relevance to the topic chosen for this study and their correspondence in both the pre- and post-revision versions of the course. Of these six questions, five were identically worded in both versions of the survey, and the remaining question was selected based on its close comparability in both versions of the course. Of these six questions, two are quantitative and four are qualitative. The quantitative responses are shown numerically; the responses to the qualitative questions were analyzed for recurring themes, to facilitate their categorization. The most frequently recurring categories identified were comments pertaining to tools and technology; faculty support; and group interaction. These recurring themes in the faculty's responses are addressed in this article. In some cases, faculty responses contained comments that corresponded to more than one of these categories. We separated these compound comments into their component categories, so we could give each aspect equal attention and observe their frequency.

Faculty responses to both semesters in each of the pre- and post-revision questions have been combined, to facilitate data analysis. Therefore, the Fall 2010 and Spring 2011 faculty responses have been combined in the analysis of the pre-revision data, and the Summer 2011 and Fall 2011 responses have been combined for the post-revision version. Faculty response rates were higher in the post-revision surveys, when completion of the final evaluation survey was made a course requirement.

V. FINDINGS

A. Quantitative Data

Two sets of quantitative survey questions from the pre-revision and post-revision final evaluation surveys were analyzed and compared. Of these two questions, one was identical in both versions, and the other was selected based on the closest correlate in both versions, given the variance in instructional modality.

In the pre-revision version of the survey, faculty members were asked:

Please rate the effectiveness of the afternoon lab sessions in helping you learn new skills/techniques.

Faculty responses rated lab session effectiveness on a scale of 1 (low) to 7 (high).

In the post-revision version of the survey, this question was revised to reflect the new format by asking faculty to rate their agreement with the statement:

You feel that you met the course development goals you set at the beginning of the semester.

Faculty responses rated their appraisal of their having met their goals using a five-point scale with values ranging from Very Satisfied, Satisfied, Neutral, Unsatisfied, and Very Unsatisfied.

Given that these survey questions used different rating scales, it was necessary to render the findings of both sets of responses congruent by assigning similar attributes to both sets of measures. In the post-revision version of this question, the last rating, Very Unsatisfied, was dropped because there were no responses in that range; this left a four-point rating scale for the post-revision responses. To align the pre-revision numeric ratings, their scale of 1(low) to 7(high) was converted to the 5-point scale (Very Satisfied to Very Unsatisfied) originally used in the post-revision ratings. The pre-revision ratings1-2 were dropped, as they had a zero response rate, leaving a five-point scale of 7-3. The 7 rating was assigned the value Very Satisfied, and the 6 and 5 ratings were combined, as each contained a null set of

zero responses in one semester. This left a four-point rating scale that corresponded to the analogous scale used in the post-revision. The results of the pre- and post-revision responses are shown in Table 3.

Findings were that the combined course effectiveness ratings (Very Satisfied and Satisfied) in the pre-revision version of the course totaled 68.8%, while the combined course effectiveness ratings in the post-revision version totaled 91.5%. This indicates an increase of 22.7% in faculty perceptions of course effectiveness in helping them to learn new skills/techniques, corresponding to their perceived abilities to meet their course development goals. Faculty dissatisfaction ratings were seen to decline proportionately in the post-revision version of the course. These responses indicate that faculty were more satisfied with the progress made in the development of their future online courses in the post-revision course.

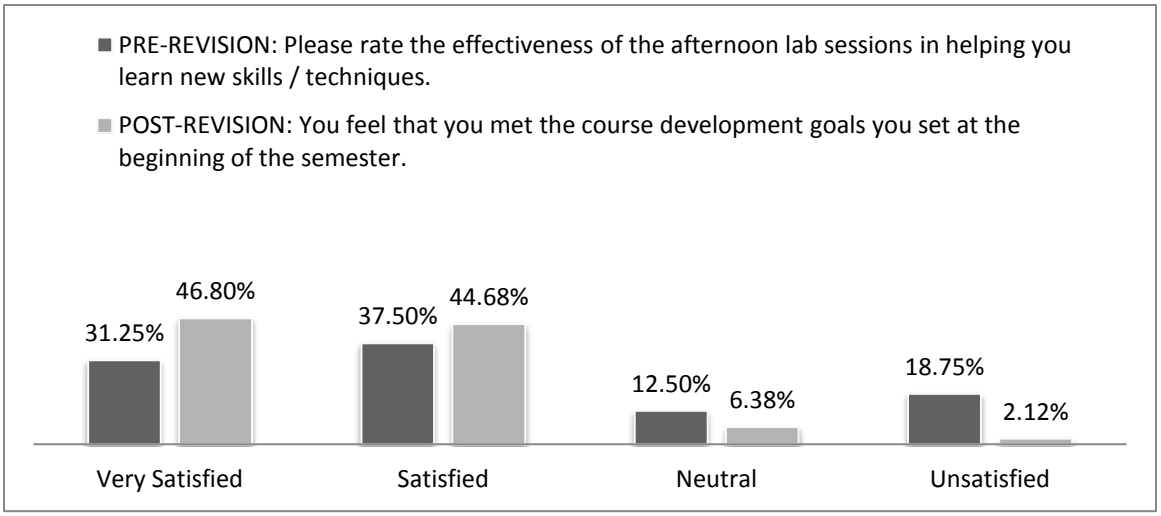

Table 3. Pre- and post-revision faculty ratings of course development instruction effectiveness.

The second quantitative question asked the participants to rate their overall satisfaction with the course, IDL6543. Both versions of the survey used a similar rating scale (Strongly Agree – Strongly Disagree vs. Very Satisfied – Very Unsatisfied). There were zero Very Unsatisfied responses in the post-revision version and zero Unsatisfied responses in the pre-revision, so the Very Unsatisfied and Unsatisfied responses were combined into a single category. This produced a four-point rating scale similar to the one used for the previous question. Table 4 displays the results.

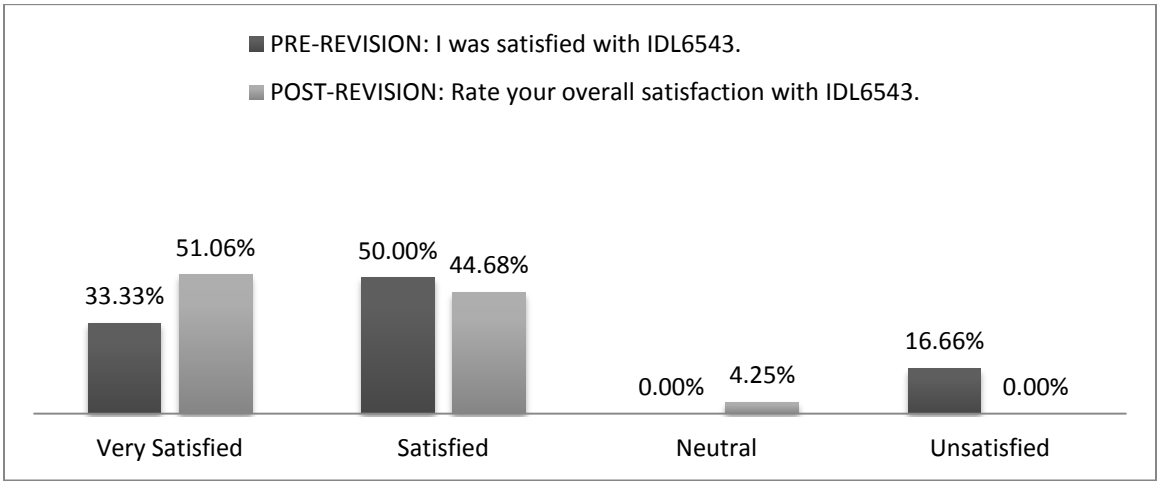

Table 4. Pre- and post-revision faculty ratings of their satisfaction with the faculty development program

Self-reported faculty satisfaction ratings of the faculty development program were 83.3% in the pre-revision version of the course and 95.7% in the post-revision version, indicating an increase of 12.4% in faculty satisfaction ratings. Even more significant is that no faculty remembers reported an Unsatisfied rating in the revised course, whereas 16.7% expressed dissatisfaction with the course in the pre-revision version. Clearly, faculty members were more satisfied in the post-revision course.

B. Qualitative Data

The following four questions were selected from the final evaluation surveys for qualitative analysis.

- Please comment on how well the afternoon labs prepared you to "do" the things you need to do.
- Overall, what did you like best about IDL6543?
- Overall, what did you like least about IDL6543?
- Thinking of the IDL6543 experience as a whole, what have we "missed?"

The first question was unique to the pre-revision version of the course (as it refers to the afternoon labs), and the other three were identical in both versions of the survey. Since none of the questions in the post-revision final evaluation surveys specifically addressed the BYCP, faculty comments to these questions were coded for emerging themes. Three major themes emerged to help support and expand upon the quantitative findings about personal course development goals and overall satisfaction with the post-revision faculty development program: (1) balance of autonomy and support teaching models; (2) implementing adult learning principles to improve individual course development; and (3) the effectiveness of community in improving individual course development. Each theme will be discussed, supported by quotes from the surveys. The influence of the blended format will also be considered.

1. Balance of Autonomy and Support Teaching Models

The rationale for the limited seat time model was based largely on two considerations. The first was faculty demand for greater autonomy in authoring their courses, within a more flexible format. The second consideration was the need to maintain a high level of faculty support that would be scalable to varying levels of technology skills and online experience. In the pre-revision version, some faculty found the FTF approach helpful, as evidenced by comments like, "We need to be taught how to use the tools and then be given time to apply that knowledge in the lab, when there are people available to help us." Others wrote that they appreciated "The hands-on training" and "The amount of individual help, the web vets, the free time to work on the module near the end." A number of participants, however, questioned the original modality's suitability for preparing them to author their courses autonomously. One noted that, "It is not useful to follow a set of step-by-step instructions and then see an end result. That in no way prepares us to actually use the tools available." Others voiced concerns that there was "Not enough time in lab to actually post in HTML and build discussion topics" and that "They were not helpful to me because I was too stressed out by having to listen to the presenter and follow along." A few reported distractions in the labs, stating that, "The most annoying part was all the conversations taking place as we worked. It was way too noisy for me, and I doubt that I recall anything from these sessions (thank god for my notes)."

A frequent source of faculty dissatisfaction was the amount of time required by the FTF sessions. In response to a survey question on what they liked least about the course, one participant noted, "The time commitment. Some of the sessions could have been shortened." Another stated that, "It was very tough to lose an entire day of work in order to attend IDL. I believe people who go through this should receive a course release and be expected to produce an entire course by the end." In the revised version, one instructor reported, "I enjoyed the mixed-mode method. It provided both structure and flexibility, given the busy nature of most faculty members." Most of the satisfaction ratings on the revised format were favorable, even enthusiastic. However, some participants still reported that they least liked the FTF

sessions. One commented that, "A couple of the F2F meetings felt tedious and not particularly useful." One faculty member ventured, "If you can't teach us in a totally online environment, why do you think we should be able to do so? Do we really need face-to-face sessions?" However, most participants approved of the balance of FTF and online instruction, one of them stating, "I do think there should be more on-campus meetings, but other than that, I was satisfied." Another wrote, "Some weeks were just too heavy. I needed the FTF for some of the materials." Some participants needed to complete their online courses in time to teach them the following semester. Providing these instructors with immediate online access to the BYCP was seen to afford them the additional time they needed.

The second consideration in revising the course was to maintain high levels of faculty support that could be scaled to the needs of participants with varying levels of technology skills and experience. In the revised version, participants expressed satisfaction with the support that was provided, commenting favorably on "The amount of resources that are available to assist us," "Having the online resources available with modules," and their "Introduction to a plethora of resources at our access." Because the class became reduced seat time, more resources were created for online use, which could be revisited by faculty even after IDL6543 was over. One noted, "I will have to go back and look up stuff as I go; it was impossible to memorize it all—but I know where to look." Another remarked that, "I really enjoyed learning about all the resources available for online classes," and "There is a lot of support available at UCF for online teaching." One participant stated that, "Participating in the course reduced my concerns about creating online courses and showed me the multiple resources at my disposal for improving such courses." The resources referenced included both the online tutorials and the array of technical and media support provided by the CDL staff.

Another aspect of the support provided to the faculty was the consultations with their instructional designers. An interesting finding was that many more participants expressed satisfaction with their consultations in the revised version, voicing appreciation for "Having an ID assigned to me during the course who gave me immediate feedback and advice on my module as I built it," lauding "The one on one time with my ID. That is where I really got to discuss how my class could evolve." Although instructional designer support was equally available in the pre-revision version, the related faculty feedback in the post-revision version was significantly more frequent and invariably positive. A possible explanation for this response may be that faculty appreciate instructional designer assistance more when they are encouraged to be less dependent on them and are given greater autonomy and increased responsibility for their learning.

Based on these results, the reduced seat time format was seen to be well accepted by a majority of the faculty, without sacrificing the quality or quantity of faculty support. The expanded online tutorials were well-received by the faculty, who also found them useful as information repositories they could refer back to, as needed. Additional staff support resources were presented at two of the remaining FTF sessions, and the one-on-one instructional designer consultations continued to be a valued resource for all participants.

2. Implementing Adult Learning Principles to Improve Individual Course Development

The pre-revision course provided weekly FTF lab settings in which the participants were assigned specific lab protocols to introduce newer technologies, learn the specific tools of the course management system, and create some of their own course content. There were several comments detailing aspects of the labs that participants found to be useful such as, "I think the labs provided some good tools to create and manage my course," and "The labs were really good at not only showing us the techniques but then allowing us to work with them." Others noted that some positive purposes for the labs were in "Learning how to use the technology and create my course," and they were encouraged by the "Exposure and knowledge about possible technologies and tools available for online teaching." However, the lab settings presented several challenging aspects in that many of the lab protocols were practice activities, as it was difficult to create specific content activities that were beneficial to the participants due to the various disciplines reflected in the IDL6543 population. Comments such as, "I only recall one session where I

was able to directly use the techs' help; as I am already very familiar with Webcourses [the CMS], most of the basic tech stuff was not useful to me as I already knew how to use it," and "Not being able to do more," revealed much of the frustration the participants felt with the structured lab activities. Others remarked, "The most important lab in my opinion was the last lab. This lab could have been divided into a number of sessions, starting the beginning of the semester," and that the labs were "Overwhelming at times–but useful," giving further evidence of participant struggles with the existing lab structure. Finally, several participants indicated their need for direct application of new knowledge, as seen in these comments: "I wish there were more hands-on activities with the various tools for teaching and assessment. I felt like one session wasn't quite enough," and "I would have liked a little bit of a fast pace, especially on the producing my course part." These opinions directly relate to the desire for independent learning, immediacy, and applicability that are cornerstones of adult learning theory [15].

Due to the challenges faced within the lab activities and the need for "More hands-on integrating and using the technology," the BYCP was designed to provide participants with immediate online access to autonomous projects that are focused on creating personalized and course-specific content. This approach of "Start building the first module sooner" has been well-received by participants; as one stated, "I like that it wasn't purely theoretical, and that we started building 'our' own course from the beginning. That hands-on aspect was so helpful in encouraging me to prioritize assignments and in helping me to implement some of the more abstract ideas we discussed." Each week in the revised version, a new task within the BYCP is presented in alignment with the weekly online course content in IDL6543. A scaffolding approach is used to allow participants to create their own course content pages using the course management tools as designed. The immediacy of applying new knowledge directly to their course development creates a momentum that is motivating to the participant and is supported by adult learning theory [15]. Participant comments such as, "I loved having the opportunity to build my course as I learned about different techniques and tools," and "Working on my module and the course," as some of the best-liked aspects of the BYCP supports this position.

Independent learning, as indicated previously, is one of the core foundations of adult learning theory, whereby participants can set a pace that is comfortable to them, and work within their personal learning style as much as possible. Hence, all of these activities are completed in an active, empowering manner. Open lab sessions are available to those who desire FTF technical assistance, as one remarked when asked what they liked best about IDL6543: "The one-on-one meetings with the ID and tech support (optional labs)." Another stated, "I improved some needed technical skills."

These results reflect that the revision of the supported FTF activities into an active, independent project-based content development structure is a critical component of the learning environment for IDL6543 participants. As adult learners, and experts in their disciplines, it is crucial for learning activities to emphasize applicability, where the learner's experiences and knowledge are useful in creating significance:

> Adult education is a process through which learners become aware of significant experience. Recognition of significance leads to evaluation. Meanings accompany experience when we know what is happening and what importance the event includes for our personalities [15].

By providing participants multiple options that support learner independence, immediacy, and applicability with the BYCP, they are also provided opportunities that allow for the creative flow of ideas based on previous experiences by which all new knowledge is compared. The integration of such new knowledge in this manner supports the significance each participant attaches to the new experience, and provides a sense of increased credibility for the activity as well. As one participant stated, "I liked learning how to use various tools and resources. I liked applying what I was learning along the way." Another participant remarked, "I loved having the opportunity to build my course as I learned about different techniques and tools," clearly demonstrating the importance of applicability to adult learners.

The post-revised lab activities as the BYCP have provided new learning advantages to IDL6543 participants. In the pre-revised structured lab activities, a scripted format of practice activities with

instructions was provided that seldom created any course-specific content. Participants were less able to express their own creativity in course content development, and they were often distracted by other participants or environmental conditions. This often left them feeling frustrated as they had difficulty understanding the importance of the learning activity, and they often felt diminished in their level of faculty knowledge and expertise. The ability to work on their specific course content from the beginning of the process, applying former knowledge to new information, and working in an autonomous fashion seeking assistance when needed, has greatly improved the overall experience of online course creation. "I really enjoyed designing my online course," and "[I liked] Creating my course," reflect this overall improved satisfaction with the process.

3. Effectiveness of Community to Improve Individual Course Development

The pre-revision course differed from the post-revision course in a few ways concerning community. First, they met FTF each week, grouped in the same formations. While this could be seen as building a sense of community, there were several discouraging comments about the small group discussions. For instance, one comment was, "There was far too much focus on miscellaneous pedagogy and groupwork and not enough focus on anything useful." Concerning the individual course development, technology proficient faculty sometimes resented being "held back" by less tech-savvy group members during the afternoon labs. In addition, there was also no peer review of individual course development in the pre-revision. In both pre and post-revisions, the showcase at the end in which faculty members presented their developing course to peers was lauded. One member comments, "The showcase was great for learning new ideas by seeing how others were putting the course into action." However, due to the lack of peer review in the pre-revision course, it was the first and last time that courses were shared.

Within the survey comments, the effectiveness of the community in the post-revision course was noted. The peer review activity, in which faculty members explored and critiqued each other's developing modules, was seen as effective for two reasons. First, by gaining exposure to other faculty member's burgeoning courses, they learned how to develop their own course. Some comments to support this include, "Learning from others as they designed their courses was beneficial"; "Seeing the variation in experience with online courses and the ways in which they set up their material was what I liked most"; "I enjoyed thinking through my class and seeing how other faculty were approaching their classes." Several faculty members simply mentioned "seeing what others are doing" as beneficial. Second, they appreciated the feedback from others to develop their own course. One comment was, "I enjoyed having classmates to discuss my work with." In contrast to the pre-revision course where FTF group discussions were not seen as helpful, one faculty member said, "I liked the FTF group meetings the best. I liked working in groups with my colleagues and reviewing our work." Others mention the effectiveness of the peer review toward developing their course.

Based on these results, the peer review activity emerged as a crucial, effective practice for the faculty members, helping prompt critical thinking and exposure to new ideas for course development. These discussions were seen as important and not just "busy work." However, there were some comments as to how to improve the peer review. There was a strong desire for peers to be grouped by similar department or content. For instance, one member said, "I felt like I didn't see many other courses that I identified with until the Showcase, when we were able to see how other instructors in the same college approached their courses. That was when it hit me that there actually were other people who were dealing with the same issues that I was. It might be a good idea to get people in the same college working together earlier." Another remarked, "I would like to see more discipline-specific time." In addition, some wanted to do more than review, but actually develop content in the moment. One remark was, "Let us brainstorm in the course and actually produce content together." This certainly bears implications on the structure of FTF days within a reduced seat time model.

The reduced seat time of the post-revision course enabled this sense of community. In the post-revision version, the small groups met or convened only three times at well-spaced intervals for a well-defined agenda that built upon the benefits of the FTF interaction. For the peer review, faculty members could

work on their courses independently between FTF sessions at their own pace, not held back by others in a FTF training session. The FTF sessions enabled participants to then share their courses and learn from others by observing other courses. Rationale, technology expertise, and feedback were all immediate. In addition, the FTF sessions encouraged participants to have their courses ready for review.

VI. CONCLUSIONS

Although blended learning is gaining prominence in education, many questions remain. This research study answers the call for additional research on blended faculty development by exploring the influence of reducing seat time on faculty satisfaction with the program and perceptions of course development goals. Our study indicates that faculty members rated the post-revision course higher in terms of both satisfaction and perceptions of their personal course development. In this section, key points are shared, recommendations are proposed, and implications for future research are offered.

There are several key points to be learned from this research study. In faculty development programs, it is common to have faculty from all departments, varying levels of teaching experience, and widely different comfort level with technology. Allowing a range of options helps to better serve all faculty members, despite the individual differences. For instance, offering opportunities for both individual and community exploration, and a balance of autonomy and support, help to support both fiercely independent faculty members and those who require more assistance. In addition, implementing adult learning principles such as making activities practical and allowing faculty members to be active very early in the faculty development program, are crucial in order for faculty to value the program. Another key point lies with the decision to reduce seat time to just three sessions over the 10-week program. The act of reducing seat time better enabled the multiple opportunities and options that faculty members need. For instance, when online, they can go at their own pace and be more independent in their learning. During the FTF sessions, they can choose to receive more support if necessary. Revising the faculty development program to a reduced seat time model also encouraged us to better take advantage of the few FTF sessions that would be offered. The peer review activity serves as a good example of this. Moving the BYCP to an online environment also required that an online repository of tutorials and materials be created. The unintended effect was that faculty of present and past IDL6543 programs could revisit this material as needed. This helps to support the faculty communities well after formal faculty development ends.

Several recommendations can be offered from the findings of this research study. First, reducing FTF time is lauded by faculty members who are busy with time commitments and restraints. However, the time that is instead spent online needs to be concentrated on something active, relevant, and practical to faculty needs. Faculty appreciate being able to start developing their courses right away. We suggest allowing faculty members to begin incrementally creating their content as soon as possible, with support provided as needed. In addition, the concept of peer review is highly recommended in faculty development to better support a community of professionals. We suggest to group faculty members similarly by subject matter or department, in order to maximize the practical applications and relevance of the activity.

This study was intended as an exploration of the effectiveness of the post-revision version of IDL6543 and to open the doors for future research endeavors. A limitation to the current study was that surveys were the single measure of faculty satisfaction. Although faculty members believed that their course development goals had been attained, it is impossible to determine from a survey whether they were actually attained. While survey responses only give perceptions in the moment, they do serve as a valuable initial evaluation of phenomena and inform future studies. For the next study, we intend to use additional qualitative measures (interviews or blogs) to further explore the open-ended comments from the survey and track changes and progress over the duration of the faculty development program. We also intend on incorporating additional quantitative measures, such as a critique of the content modules developed by faculty at the culmination of the program. This would allow us to see if faculty perceptions are being exemplified in the actual product created. In general, future research is needed to discover the impact of certain subject matters on faculty development. We also need to better understand how faculty

members progress after the faculty development program is over, in order to better understand the support services they may need and see how communities can be better supported after the formal training ends.

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VIII. ABOUT THE AUTHORS

Aimee deNoyelles, EdD, became an Instructional Designer in the Center for Distributed Learning of the University of Central Florida (UCF) in June 2011. She consults with faculty members at UCF, supporting them to design and develop their blended and online courses. Her current research interests include virtual world-mediated communication, gender, and the facilitator's role in online discussions. deNoyelles' research has been published in several journals including Computers and Education, International Journal of Innovation in Education, and the Journal of Special Education Technology. Her research has also been presented at national and international conferences, including the American Educational Research Association (AERA), Association for Educational Communications and Technology (AECT), and the Society for Information Technology and Teacher Education (SITE). Prior to joining UCF, she taught online and face-to-face education courses at the University of Cincinnati while earning her doctorate in Curriculum and Instruction with a specialization in Instructional Design and Technology.

Clara Cobb, MA, has been a Visiting Instructional Designer at the Center for Distributed Learning of the University of Central Florida (UCF) since May 2011. She consults with UCF faculty members and assists them in designing and developing their online courses. Ms. Cobb also supports the CDL team in research and development efforts for a number of interdisciplinary projects; including UCF's Blended Learning Toolkit project, in which she assisted participating faculty with the conversion of their F2F curricula to a blended learning format and produced learning object templates that are being used by 20 participating universities. Prior to coming to CDL, Ms. Cobb was an ISD project lead coordinating a team of instructional designers, developers and programmers in the production of online training for the Navy. Since 2005, she has developed hundreds of hours of online, blended, and enhanced F2F training for several companies in the Research Park area and designed simulations, scenarios and avatar-mediated virtual environments for civilian and military clients. She earned her MA in Instructional Technology from UCF in 2008.

Denise K. Lowe, EdD, was appointed Instructional Design Team Lead in the Center for Distributed Learning of the University of Central Florida (UCF) in January 2011. She joined UCF in 2007 as an instructional designer. Dr. Lowe has been a part of the online faculty professional development program, IDL6543, since coming to UCF. She has developed and facilitated sessions, consulted with faculty participants, and helped to design and develop online course content with a growing team of instructional designers, graphic artists, and technical support personnel. In 2011, she was part of a team effort to redesign the program to meet the needs of the faculty and university as UCF dealt with a growing online population. Dr. Lowe has been teaching face-to-face and online courses in the field of leadership development, interpersonal conflict management, and organizational communication for over 10 years, bringing that knowledge and experience to bear on IDL6543, projects, and research. She received her Doctorate of Education in 2006 in the field of Organizational Leadership of Higher Education. Dr. Lowe has presented at prestigious conferences such as the SLOAN-C International Conference on Online Learning (2011) and the 2nd Annual Education Technology Strategies Summit (2012).

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