A USER CENTERED FACULTY SCHEDULED DEVELOPMENT FRAMEWORK

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ABSTRACT

Colleges provide professional development opportunities to faculty to promote knowledge growth and improvement of skills. At the college, Scheduled Development (SD) time for faculty is based on the educational practice and recognition of the need for continuous professional development of faculty members. The paper presents a user-centered approach to the development of an online environment to enhance and promote active collaboration among faculty in the context of professional development. The best practices in software design were adopted in order to reduce the cognitive overload on the user so that they can stay engaged and focused on the task. The Scheduled Development (SD) Connect tool is under development, implementation and is currently undergoing testing. SDConnect© is a multi-facet targeted software tool that aids in dissemination, collaboration, tracking, and integration of faculty SD for post secondary institutions. The tool will also enable College faculty and staff to access the information database on SD activities, with the goal that it may lead to active collaborations and synergies among the faculty, departments and schools. This project will also enable the administration to efficiently administer SD proposals and approvals and to establish historical records and trends of the SD activities of faculty for better resource management. SDConnect© is part of an ongoing project called DEAL (Diversity in an Environment of Accessible Learning) funded by the College.

KEYWORDS

Collaboration; Usability, Dissemination; Curriculum; Teaching and Learning, Sharing

1. INTRODUCTION

Scheduled Development (SD) time for faculty is based on the educational practice and recognition of the need for continuous professional development of faculty members related to their current or potential roles at the college, and in the application of their knowledge, skills and awareness to the development of the college as a learning-centered institution. Scheduled development time and activity provides faculty members with the necessary opportunities to respond to ever changing learning and development needs of students, departments, community groups, the college and the individual faculty members themselves. Faculty scheduled development time, allocation and procedures were managed by the various schools and departments within guidelines developed and refined by the Joint Committee on Scheduled Development (JCSD). The JCSD task is to refine and develop consistent procedures and guidelines for SD planning, proposing, reporting, reviewing, dissemination on SD outcomes, distribution of information on SD activities and publication of SD project outcomes.

The College commits a large portion of its annual budget to the activities undertaken by faculty during the SD time, However, the outcomes of SD activities are not widely and consistently shared across schools and departments. Management of SD proposals and approvals also varies among different schools and departments. In this context, SDConnect© was proposed with the objective to develop a framework for dissemination, tracking, integration of SD related information to enhance collaboration among faculty in the college and help college administration to optimally allocate resources for faculty development. The tool will enable Camosun College faculty and staff to access the information database of SD activities, with the goal that it may lead to active collaborations and synergies among the faculty, departments and schools. The project will enable the SD committee to efficiently administer SD proposals and approvals and to establish historical records and trends of the SD activities of faculty.

2. BACKGROUND AND MOTIVATION

The original research questions that have been posed include: "How do we lead and create an online environment that promotes collaboration amongst college faculty?" and "How do we create a network of collaborators?" Collaboration in schools and colleges is multi-faceted by placing value on cooperative work, giving latitude to teachers and instructors to influence important aspects of curriculum development, and providing release time for collaborative tasks.

Historically, collaboration among teachers and instructors has neither been taught nor modeled in colleges and schools. Also, there has been lack of meaningful support from administration to promote a collaborative environment conducive to "learning to teach" or to improve existing skills (Goddard and Tschannen-Moran, 2007) while there has been evidence of efforts among faculty to increase collaboration (Brownell et al, 1977; Louis et al, 1996) in order to improve teaching efficiency (Schachar and Shmuelevitz, 1996), creates a more positive attitude towards teaching (Brownell et al, 1977), and induces collegiality and trust among teachers (Tschannen-Moran, 2001). Also, there has been evidence that collaboration among faculty improves learning outcomes for students as teachers become more engaged and confident on their ability to teach (Hausman and Goldring, 2001) while enabling knowledgeable conversation about the process of teaching and learning and building collective capacity (Nelson, 2012).

Fullan (2010) observes that the "collective capacity" built through planned collaboration is a "hidden resource" that the educational system has neglected to cultivate. Stoll et al (2006) further asserted that a focus on building collective capacity within colleges is key to sustainability in student learning. A school-wide culture that expects collaboration among faculty, with an inclusive, genuine and focused practice is essential to improve student learning. Therefore, collaboration must be embedded in the routine practice of the colleges.

The literature review by Cordingley et al (2003) asserted that collaborative scheduled professional development that emphasizes peer support has positive impact on students, including improved motivation and performance. Brownell et al (1977) also affirmed that positive outcomes such as heightened efficacy and improved knowledge base are linked to improved student achievements.

With these issues in mind, a dissemination tool was developed to enhance collaboration by providing an environment that informs the college community of Scheduled Development (SD) policies and procedures, informs faculty of the opportunities and projects available to them, and also lists the active projects currently being undertaken by faculty members. The next step is to implement this capability to allow the Camosun community to search through a repository of past and current SD activities thus fostering cooperation and collaboration on complementary projects.

SDConnect© captures the knowledge around tracking and management of SD activities thus allowing the JCSD to establish historical trends. The tool will allow faculty to submit a proposal online, time stamp the document, record any modification to the status of the SD proposal, and view its status as the SD form moves through the system. Finally, the tool will promote liaison between the various departments in the College to aid and facilitate some of the administrative duties such as reminders for an ethics application form, request for attending conferences and meetings in the pursuit of scholarly activity, travel, etc.

3. METHODOLOGY

The methodology adopted was unique since we gathered information by means of extensive consultations and meetings to with end users and administrators determine the College culture and existing practices, collect documents on processes, procedures and historical information, identify the stakeholders, document business needs to identify the needs and expectations, determine project outcomes in order to establish clear and achievable objectives, and define assumptions and constraints.

The assumptions were that if the focus of development is placed on the stakeholders and their needs, it will results in a tool that is user-centered and targeted and that provides a framework for ***dissemination*** of information, ***tracking*** of documents through the system for submission and approvals, ***integration***, and ***collaboration*** among members of the college community. Since the stakeholders are involved in the design, they are engaged and motivated, and based on the research evidence, it might lead to active collaborations and synergies among the faculty, departments and schools.

Once the objectives were identified, armed with the body of knowledge of the literature around the importance of collective capacity, and knowledge to build collaboration among teachers and instructors, SDConnect© was proposed as a three-phased development: dissemination (phase I), processing (phase II), and search (phase III). During each phase of the development, the focus of the study was on targeted stakeholders to ensure that the program is focused on their needs as users need to feel in the "flow" for optimal experience (Csikszentmihalyi, 1991).

The usability testing was designed by identifying issues around learnability, and operability of the tool as defined by Hadian (2004) to address the accessibility barriers related to the tool usage. Tools seem to enhance learning when they are perceived as being invisible**.** The accessibility guidelines promote the success of the tool in terms of learnability, and operability of the tool. This definition was rationalized by Hadian based on the ESSI-SCOPE software design guideline. (2014).

The tool allows faculty to submit a proposal online, time stamp the document, record any modification to the status of the SD proposal, and view its status as the SD form moves through the system. Finally, the tool promotes liaison between the various departments in the College to aid and facilitate some of the administrative duties such as reminders for an ethics application form, request for attending conferences and meetings in the pursuit of scholarly activity, travel, etc. This process was crucial to design and implement a system that is viable to College needs as well as to the sustainability of the SD Repository Project and its scalability for future growth.

Since collaboration metrics are not easily defined, we have tried a very targeted approach to identity the needs of the college. The next step is to implement this capability to allow the Camosun community to search through a repository of past and current SD activities thus fostering cooperation and collaboration on complementary projects. SDConnect© captures the knowledge around tracking and management of SD activities thus allowing the JCSD to establish historical trends.

A. Need Assessment

To engage the faculty, we proceeded by delving into a formal inquiry, and handled the project through the SOTL (Scholarship of Teaching and Learning) philosophy. This approach enabled us to define the goals and objectives of the project based on principles of teaching and learning (Storey, 2009).

B. Data Collection

We used a targeted approach through extensive consultation and interviews to determine the College culture and existing practices. We collected documents on processes, procedures and historical information; identified the stakeholders; documented business needs and expectations; determined project outcomes, established clear and achievable objectives; and finally defined assumptions and constraints before beginning to plan the implementation of this targeted tool.

By utilizing the CCAUL (Camosun College Accessibility and Usability Laboratory) for development and testing during each cycle, we were able to obtain a perspective on the users and stakeholders (Faculty, Chairs, Deans). The OVO Integrated Usability Software was used to create testing environment, questionnaires and forms. The faculty can view their current and archived SDs. The process is broken down in to three modules [intent, proposal, and report]. Intent is designed to allow faculty to think about when they would like to take their SD and how they propose to use the time allocated. The proposal allows them to describe various activities the applicant is planning to undertake. Once the instructor finishes his/her SD time, he/she will report on the outcome and submit a document outlining the outcome of the activity. These materials are uploaded to the server with the intention of sharing with the college community. Following the completion of the application from the faculty, the Chair of the Department needs to intervene in the approval process. From the Department Chair's perspective, two separate modules are available. The approval window allows the chairs to see if there are any documents waiting to be reviewed. Another interface was designed with the idea of allowing Chairs to view the Faculty proposed SD time with the hope of allowing Chairs to look at their departmental budget and faculty teaching time. Chairs can filter the result based on the fiscal year. They can also identify at a glance whether a document has been approved or is waiting to be approved, or the faculty has not submitted their work yet.

For the Dean's interface for approving SDs, the Dean gets the notification as an indicator of documents waiting for their approval. Another interface was designed with the goal of an overview of the situation in each department with a summary of scheduling intent per department. One more interface (not shown) was designed to help Deans and their executive assistants to identify documents that have been sitting in the system and have not been processed due to various reasons such as lack of a Chair's intervention/decision. They could actually take on the role of the chair and push the document through the system.

4. CONCLUDING REMARKS

SDConnect© has been introduced as a pilot project At Camosun College. The tool has enabled Camosun College faculty and staff to access the information database of SD activities, with the goal that it may lead to active collaborations and synergies among the faculty, departments and schools. The result of the study has enabled us to determine the operational and usability issues before we took the system live. We applied the same approach for submission and approval process of SD documents. The feedback from faculty has been overwhelmingly positive. Currently, SDConnect© has been in beta testing for three fiscal periods. The preliminary results and feedback from faculty and administration has been very positive and further improvements and testing are planned to improve the tool and the management of the database. The proposed tool is of interest to all colleges and schools that have an active professional and scheduled development program and intend to streamline the management of resources and outcomes and promote active collaboration among faculty. The practices described in the paper are innovative as the development of the tool has followed the best design practices for software development in terms of accessibility and usability. The paper is a work-in-progress as we are planning the final phase of development and testing is required to properly access the improvements in faculty collaboration and resource management.

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