

Proposal for the 2018

Developing A Formal Conceptual Process Model for Mentoring students in the development, execution and completion of Capstone and/or Independent Projects

Title: Developing A Formal Conceptual Process Model for Mentoring Students in the Development, Execution and Completion of Capstone and/or

Independent Projects

Abstract:

Independent study projects and capstone courses help students to develop higher-level learning outcomes that will prepare them for transitioning to greater confidence and competence in the workplace. Students and student advisors have expressed a need for a formal, systematic process and a range of pragmatic learning tools to assist students in developing, executing and completing independent learning projects including final capstone work. This session will present a variety of learning tools and activities that will provide students with a platform for effectively developing and executing capstone and independent projects or that will enhance the relevance and usefulness management concepts and theories in understanding and addressing challenging problems facing organizations.

Key Words: Capstone, Independent Study, Advising/Mentoring

**Introduction**

Colleges and universities in general as well as business schools are facing unprecedented challenges to provide learning experiences for students that enable them to acquire knowledge and skills that are relevant for finding good jobs after graduation. In addition, business school stakeholders are demanding greater accountability from colleges and universities to demonstrate that learning outcomes are being achieved and that students are obtaining a positive return on their financial investment on their education upon graduation. In response to these challenges, many business schools, in particular, are developing more experiential, skill development courses, programs, and opportunities for their academic programs. One type of learning activitiy that has become increasingly popular is a requirement for students to complete a capstone project or independent study that requires primary and/or secondary reseach. One of the challenges of this type of learning activity is that it is labor and time intensive for faculty/staff who are needed to coach, advise, and mentor students. The focus of this session is to provide guidance to faculty/staff mentors of capstone projects/independent studies on best practices for supporting students, as well as an approach for students to use to guide them through the process for completing a capstone project/independent study.

**Learning Objectives**

The objectives of this session are:

* To present a formal conceptual process that assists faculty/staff mentors and students in developing, executing and completing capstone projects and independent studies.
* To develop skill in applying key skills related to various steps in the capstone project mentoring process.
* To understand how various management concepts and theories can be applied to “real world” organizations.

**Theoretical Foundation/Teaching Implications**

There is a lack of comprehensive process models to guide faculty/staff and students in the design and execution of capstone projects/independent studies. A formal process model could be highly beneficial in clarifying the roles and best practices for faculty/staff and students to make the capstone project/independent study process as efficient and effective as possible. This is especially important for this type of project for faculty/staff who may be carrying heavy teaching loads and have limited time and resources available to mentor students.

**Exercise Overview**

The learning activities presented in this session will help to alleviate the concerns that many students and faculty/staff mentors may have about the capstone project/independent study process by providing a conceptual process model, role clarification and best practices for each step of the process, templates for completing various elements of the project, tips for conducting literature reviews and developing action plans/recommendations. Specific ideas for how to apply the model to various management courses including organizational behavior, organizational development, human resource management, leadership development, strategic management, international business, and entrepreneurship will be presented.

The session will start with an overview of the process model for mentoring and the best practices associated witht the roles of faculty/staff mentor and the student (see Figure 1). Based on this, a number of case studies of actual students who have completed capstone projects/independent studies will be presented for participants to analyze in small groups. Each group will come up with an action plan for how to effectively mentor the student in each case. The focus of these cases will be on common challenges that students experience when working on capstone projects/independent studies such as defining the scope and objectives of the project, conducting literure searches, designing a research methodology to support project objectives, selecting appropriate analyses for quantitative/qualitative data, interpreting data, presenting results, formulating recommendations/action plans for organizations, writing the final report, and preparing/making final presenttions of their projects.

Finally, feedback from students who have completed the process about what they learned and key challenges associated with the process will be presented along with a discussion of how to incorporate capstone projects/independent studies into various management courses.

**Session Description and Plan**

Total Session Time: 60 Minutes

Session Type: Face-to-face, group activities, discussion and analysis

Focus: Undergraduate students enrolled in management courses

Session Overview and Objectives (5 minutes)

Overview of the Capstone Project Process Model (10 minutes)

Faculty/Staff Mentoring Role: Best Practices

Student Role: Best Practices

Case Study Examples of Student Capstone Projects/Independent Studies: Common Mentoring Challenges (30 minutes)

Small group discussions and presentation of action plans for mentoring

Students

Small group discussions and presentation of evaluating capstone

projects

Discussion of Applications of the Capstone Project Process Model to Various Management Courses (15 minutes)

Organizational behavior, organizational development. human resource

management, leadership development, strategic management,

international business, and entrepreneurship

**Figure 1: Capstone Project Process Model**

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| Step 1: Mentor-Student Initial Meeting to Discuss Project Requirements | Step 2: Brainstorming Ideas for Project Topics | Step 3: Development, Submission, and Approval of Project Charter | Step 4: Initial Project Execution | Step 5: Ongoing Check-In Meetings and Evaluation | Step 6: Preparation for Key Deliverables - Final Presentation/Report | Step 7: Final Submission of Key Deliverables and Debriefing |
| Mentor Role  -Explain the project requirements, evaluation methods, grading rubrics, and other goals and expectations.  -Provide the student with a course syllabus for the project.  -Work to develop rapport with the student.  -Ask the student about his/her career goals and interests.  -Ask the student questions about his/her interests for the project.  -Suggest ideas for potential projects.  -Encourage the student to conduct some of their own research to identify potential ideas for projects. | Mentor Role  -Communicate with the student via e-mail or face-to-face meetings to discuss their potential ideas for the project and to offer feedback to help the student to refine the focus of the project.  -Evaluate the student’s ideas for the project in terms of whether they possess clearly defined objectives, an appropriate topical focus, and the scope of the project is manageable given the amount of time and effort that is reasonable to expect of the student given the number of credits earned for the class. | Mentor Role  -Answer questions from the student regarding the topic of the project.  -Offer to review a draft of the project charter from the student.  -Assist th student in obtaining IRB approval, if necessary.  -Review the final version of the project charter that is submitted and evaluate it in terms of possessing clear objectives, an appropriate scope, and a systematic and realistic timeline for completion including regular check-in meetings.  -Send feedback regarding the project charter to the student via e-mail.  -Schedule the first check-in meeting with the student in 1-2 weeks. | Mentor Role  -Remind the student about the next check-in meeting.  -Be available to answer questions or to meet at the student’s request. | Mentor Role  -Meet with the student for check-in meetings and provide constructive feedback to give the student a clear sense of what they need to do to improve their project and to move the project forward.  -Use the project charter timeline as the basis for evaluating the student’s progress on the project at each meeting. Ask the student to update the timeline based on their actual progress.  -Be supportive of the student’s efforts and provide encouragement if they are struggling or not making as much progress as they should be making based on the project charter timeline.  -Review any data collection methods that the student may be using such as surveys and interviews to ensure that the questions are aligned with the project objectives. Provide feedback to the student. | Mentor Role  -Continue check-in meetings with the student and provide feedback.  -Strongly encourage the student to complete all primary data collection at least 2-3 weeks before the final deadline.  -Continue to provide support and encouragement.  -Offer to review a rough draft of the report to provide feedback to the student.  -Confirm final delivery date(s) for the submission of the final written report and the presentation.  -Remind the student to review the grading rubrics for the final written resport and the presentation. | Mentor Role  -Attend the final presentation meeting with the student.  -Provide detailed written feedback to the student in the written report.  -Provide feedback to the student at a debriefing meeting after the project has been submitted and the presentation has been made. Discuss practical takeaways with the student. |

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| Step 1: Mentor-Student Initial Meeting to Discuss Project Requirements | Step 2: Brainstorming Ideas for Project Topics | Step 3: Development, Submission, and Approval of Project Charter | Step 4: Initial Project Execution | Step 5: Ongoing Check-In Meetings and Evaluation | Step 6: Preparation for Key Deliverables - Final Presentation/Report | Step 7: Final Submission of Key Deliverables and Debriefing |
| Student Role  -Contact faculty/staff mentor to set-up an initial meeting to discuss the project.  -Review sample projects from previous terms, if available.  -Come prepared to the meeting and work to` develop rapport with the faculty/staff mentor.  -Ask questions of the faculty/staff mentor to understand expectations, workload, etc. | Student Role  -Identify career goals and interests.  -Review topics of interest from classes taken in the past.  -Read articles and books about relevant issues that could be topics for the project.  -  -Meet with other professors and practitioners to identify potential topics for the project.  -Generare a list of potential topics for the project. | Student Role  -Identify the criteria for evaluating project topics.  -Decide on the final project topic.  -Draft a project charter using the template provided by the faculty/staff mentor.  -If a real world organization is involved with the project, discuss the project with the contact/project sponsor at this organization.  -Ask the faculty/staff mentor questions about the project charter or schedule a meeting, if necessary.  -Submit the final version of the charter to the faculty/staff mentor for approval.  -Obtain IRB approval, if necessary.  -Send a copy of the final project charter to the organizational project sponsor, if there is one. | Student Role  -Proceed with the execution of the project based on the timeline laid out in the project charter.  -Create a master template file that includes all of the required sections of the final capstone project inserted as headers.  -Start conducting secondary research (the literature review) on the topic of the project.  -If primary data collection will be part of the project, start developing the methods/ and instruments for collecting the data. | Student Role  -Draft questions for all data collection methods such as surveys and interviews.  -Check to make sure that the data collection method questions will support achieving the project objectives.  -Obtain feedback from the faculty/staff mentor and the project sponsor in the organization (if working with one).  Finalize the data collection methods.  -Conduct check-in meetings with the faculty/staff mentor and the project sponsor, if there is one.  -Continue literature review. Categorize articles into relevant sub-topics and update the master template file to include each sub-topic as a sub-header.  -Sequence sub-topic headers in the master template file to reflect a logical ordering of issues related to the topic.  -Use this an opportunity to draft the easier sections of the paper including the introduction, methodology, organizational overview, etc. | Student Role  -Complete the final primary data collection.  -Analyze the data in order to answer questions related to the project objectives.  -Triangulate quantitative and qualitative data to enhance the depth of analysis.  -Write formal key results statements for clearly presenting results.  - Identify the key results based on the data analysis.  -Use visuals such as barcharts and summary tables, etc. to present key results.  -Brainstorm recommndations or action steps that address the practical implications of the results. Make sure that recommndations are specific and action-oriented.  -Update master template file.  -Confuct a check on the master template file to ensure that all of the project requirements have been met.  -Submit draft of overall master template file to the faculty/staff mentor for feedback or meet to discuss the rough draft.  -Draft the presentation of the project (if one is required) based on the written report.  -Ensure that the requirements for the presentation are addressed in the presentation.  -Practice th presentation multiple times using a mock audience that can provide feedback, if possible. | Student Role  -Submit the final written report in pdf format.  -Make the final presentation, if required.  -Submit a copy of the written report to the project sponsor in the real world organization, if there is one.  -Offer to make a presentation of the final project to the project sponsor.  -Thank your faculty/staff mentor and any project sponsors for their support during the project. |