Proposed Model for Inter-Institutional Collaboration on Instructional Design Projects

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Abstract

Instructional design requests are multi-faceted and complex, necessitating a broad skill set and efficacious problem-solving procedures. While individual instructional designers in higher education are effective in their work, partnering with designers from other higher education institutions allows them to leverage one another's experiences, skills, and approaches to these complex design requests. There is much research regarding instructional design processes, but there is none that addresses inter-institutional collaborative efforts to address complicated instructional design requests from faculty and subject-matter experts. In this article, we review current trends and discussions of instructional design models and practices and applicable communication theories and practices. We then propose a model for cross-institutional collaboration based on instructional design, communication, and collaborative processes.

Keywords: collaboration, instructional design, inter-institutional, theory, communication, framework, project management

Introduction

This article provides an opportunity to reflect on the work of instructional designers at higher education institutions, specifically looking at opportunities for inter-institutional collaboration and peer networking. We, as practicing instructional designers at different institutions, have engaged in an intentional, informal process of sharing ideas, methods, and solutions related to instructional design projects and requests. Through this process, we have recognized the benefits of this collaborative work and have seen improvements in our day-to-day instructional design tasks, our strategy for assisting faculty and subject-matter experts in development projects, and contributing meaningful work at our respective institutions. In addition to enriching our experiences as instructional designers, this collaborative approach creates an opportunity to receive frequent feedback and ideas from colleagues from other institutions.

The role of the instructional designer in higher education is multi-faceted and is primarily centered around supporting faculty and subject-matter experts with course design, alignment, and assessment. Support is often provided through consultations and presentations, both in in-person and online modalities. For this article, faculty are discipline specialists who engage in the teaching and learning processes, and subject-matter experts may be involved in the curriculum and course development process, although they may not necessarily teach. The work of the instructional designer in higher education has continued to evolve, adapting to changes in educational technology, new instructional theories, and faculty and subject-matter expert needs. As such, instructional designers are expected to have a robust knowledge of instructional practices and a foundation in learning theory and alignment work. Typically, instructional designers have opportunities to collaborate at inter-institutional conferences and retreats; these

events are intentionally devised to provide designers with the chance to network and share ideas. However, conferences tend to focus on ideation and networking versus building models of sustained, collaborative support. By engaging in informal and frequent cross-institutional collaboration and communication, instructional designers can benefit from sharing ideas and practices.

Substantial literature has been written on the role of the instructional designer in the teaching and learning process and how the instructional designer can support faculty and subject-matter experts (Kebaetse & Sims, 2016; Kuhlenschmidt, 2010; Rothwell et al., 2015; Roytek, 2010; Williams van Rooij, 2010). However, few pieces have been authored that explore how instructional designers can better manage and process their work if they engage with other instructional designers from other institutions to discuss ideas, develop strategies for working with faculty and subject-matter experts, and collaborate on projects. Typically, process-oriented studies apply project and task management principles to address instructor development and design requests rather than focusing on the work process of the instructional designer. Our preliminary investigation of the literature demonstrated that additional inquiry is needed as it pertains to opportunities for this inter-institutional collaborative work to enhance the support process. Recognizing these gaps in the instructional design literature, we review trends in instructional design surrounding approaches to faculty support and managing requests, including outlining areas of potential concern. We look to models from communication studies and allied disciplines grounded in theories and managing collaborative projects that can inform collaborative instructional design practices.

After reviewing the literature and analysis of select interdisciplinary models, we propose and elucidate a new model for inter-institutional support and collaboration. Our goal for this

model is to open a conversation on opportunities to intentionally and regularly engage in collaborative discussions on instructional design work centered around specific projects and problems. The model can be used as a tool to help facilitate these discussions and serve as a heuristic for engaging in collaborative, inter-institutional work on instructional design projects. The model design is based on the scholarship and inquiry areas covered in the literature review and is intended to serve as a representation of practical workflow aligned with scholarship and research-based practices. As instructional designers who participate in conversations on practices and methods of providing faculty support, we have constructed this model to be incorporated into collaborative work within our profession.

Literature Review

Instructional design theory is positioned as a dynamic approach to designing, developing, and supporting the teaching and learning process. As instructional designers, our work can draw from a variety of instructional theories, allowing for a bricolage approach to constructing an instructional design paradigm; this approach is recognized heavily in the literature, considering the history of the field (Reigeluth & Carr-Chellman, 2009; Snelbecker, 1999a; and Snelbecker, 1999b). The literature review is divided into four segments, each corresponding and informing the categories used in our model. The section "Perspectives from Communication and Organizational Theory" informs the "Relational-Level" of our model, building an understanding of how theories and strategies can inform our work; "Considerations for the Instructional Design Process" addresses the "Task-Level" and provides a direct connection to instructional design work; and finally, "Opportunities for Cross-Institutional Support" integrates opportunities for inter-institutional collaboration. The final section of the literature review, "Opportunities for New Models and Approaches," brings key ideas forward for continuing the discussion.

Perspectives from Communication and Organizational Theory

Drawing in knowledge-making and communication management from allied fields, technical communication provides an opportunity to evaluate work patterns of individuals in roles critical to the teaching and learning process. Focusing on organization and collaboration of content management from a technical communication perspective, Batson and Feinberg (2008) propose a model for managing collaboration in information design projects and tasks that incorporate subject-matter experts and communication specialists. Additionally, Kline and Barker (2012) present the CANFA model—collaborate, apply, negotiate, facilitate, and activate—as an opportunity to integrate collaboration directly and intentionally into technical communication work. Investigating the overlap between instructional designers and technical communicators' collaborative work patterns can assist instructional design in the investigation of opportunities and models for peer support through the cross-institutional collaboration of instructional design projects and problems.

Human communication theory positions and supports the need for effective collaborative strategies to provide additional insight into the instructional design process (Mowlana, 2019). Schema theory posits that people develop and compartmentalize perceptions based on lived experiences (Neumann & Kopcha, 2018). Per our personal experiences as instructional designers, the challenges of faculty and subject-matter experts are often based on compartmentalized notions of design processes and perceived roles; complex requests emerge from assumptions nested in the requestor's schemata and are often based on the instructional designer's perceived role, processes, capabilities, and resources (Campbell, 1999 and Halupa, 2019). A competent communicator recognizes these schemata as potential points of convergence or divergence and adjusts their approach to working with the requestor appropriately. Reflecting

on the earlier discussion of Kebaetse and Sims's (2016) and Kuhlenschmidt's (2010) work in instructional design, we can develop frameworks for responding to and supporting differing requests.

Prioritizing the needs of design requests necessitates employing the situational theory of problem-solving to ensure tasks are orientated and addressed properly (Chen, Hung-Baesecke, & Kim, 2017; Chen et al., 2018). The situational theory of problem-solving proposes a model that addresses the tendency for people in support roles to place the needs of others before their own proven processes and requires honing effective communication skills, heightening communication competence, and being able to interpret and articulate contexts to prioritize tasks (Chen et al., 2018).

Giles and Ogay (2016) conceived communication accommodation theory, which postulates that communication interactions are perpetuated by preconceived notions, immediate needs, and ongoing problem-solving efforts of conversation partners. Communication accommodation theory requires oscillation between task and relationship-orientation and can provide a framework to help structure and articulate how inter-institutional collaboration can enrich the instructional design process.

Considerations for the Instructional Design Process

A core role for instructional designers in higher education is to provide support to instructional units. Specifically, instructional designers often work closely with the institution's faculty to develop course materials, align learning outcomes, and create engaging and meaningful teaching and learning contexts. Recognizing a gap in understanding the work process of instructional designers in responding to requests from faculty and subject-matter experts, Roytek (2010) categorized patterns of instructional design work, giving special attention to the

tools and approaches that instructional designers use in their processes. Select efficiency

methodologies that Roytek identified in this process that focus on collaboration were to rotate

instructional designers on projects, cross-utilize learning from other projects, and share strategies

from other teams. As Roytek's suggestions focus on collaboration within a single institution,

what is missing from this narrative is the work of supporting faculty and subject-matter experts

and employing strategies of sharing experiences and ideas across institutions to better respond to

these requests for support.

Faculty and subject-matter experts commonly perceive that instructional designers offer

basic educational technology support, for example, in learning management system support

(Lieberman, 2017). However, instructional designers provide a more comprehensive array of

support and expertise than what is frequently sought. As a result of this discrepancy, faculty and

subject-matter experts often range in their levels of reception of instructional design services

(Halupa, 2019). To better understand and support faculty based on their levels of comfort and

use of technologies in the teaching and learning process, Kuhlenschmidt (2010) applied Roger's

2003 innovation framework to argue that faculty can be categorized into various groups:

innovators who take the initiative and explore independently; early adopters who learn

technologies and participate in collaborative efforts to understand the technologies better; late

adopters who comprise the majority of faculty and will engage once they see the impact of the

new ideas and technologies; and laggards who rely on colleagues and see a minimum value in

the technologies (2010, pp. 260-261). Kuhlenschmidt's categorization work is important for

understanding the support process and the socio-historical context for how to tailor instructional

design strategies and methods for a particular audience. Layering the work on identifying models

for faculty support, such as that done by Kebaetse and Sims (2016), onto the categories discussed

by Kuhlenschmidt and considering the ethical challenges presented in Osgulthorpe et al. (2003) can give the instructional designer a method of identifying strategies and methods that may help support and manage faculty requests. For example, in crafting a development plan for a course design project, understanding where a faculty developer is on the innovation framework scale will allow the designer to tailor the needed support to that individual, ensuring that both the faculty and the instructional designer know what level of support will be offered and what the expectations will be of their contributions.

As the goal of most instructional design positions is to support faculty and subject-matter experts in developing meaningful learning experiences, examining the literature on project management as it relates to collaboration is necessary. Specifically, literature on applications of project management provides insight into the work patterns of instructional designers while revealing where opportunities for collaboration may fit. Instructional designers need to not only be familiar with the instructional design process but engaged in understanding and applying strategies from project management (Williams van Rooij, 2010). A strategy discussed by Rothwell (2015) is the importance of clear communication and transparency in this process to ensure project milestones and objectives are met. Reviewing the proposed models, while collaboration and communication are crucial elements in the field, they can easily be relegated from the planning process due to high levels of work and competing timelines. By intentionally including a cross-institutional collaboration model grounded in systems communication, instructional designers can review project milestones and communication strategies with colleagues who can review and ensure that communication is occurring (Ford & Lerner, 1992). This approach can facilitate the collaboration process and produce synergistic results.

Opportunities for Cross-Institutional Support

Discussions on collaboration in instructional design have primarily focused on the work between the instructional designer and the faculty member or subject-matter expert (Halupa, 2019). However, little is focused on the work that can occur between instructional designers to support projects. Arguments within the instructional development space have evolved from positioning the instructional designer from solely a supporting role to that of a partner in the teaching and learning process (Campbell, 1999). Placing value on interpersonal skills, specifically clear, effective communication about instructional design work, has been recognized as a critical skill for instructional designers (Rothwell et al., 2015). The narrative of positioning the instructional designer as an individual who can contribute to the teaching and learning process brings forth questions about what instructional designers can do together to reflect on and examine their collaborative work patterns.

Instructional designers establish rapport and are positioned to deliver meaningful feedback to colleagues using strategic communication, specifically situational knowledge obtained through experience, professional development, dialectical tensions and convergences, and feedback loops (Garcia-Morales, Martin-Rojas, & Lardon-Lopez, 2018). Specific dialectical tensions, such as agreeableness and disagreeableness, should be carefully monitored and interpreted throughout the support process. Through establishing these relationships and by positioning informal professional relationships as a support model, an inter-institutional approach can provide a more objective sounding board for ideas and problems.

Opportunities for New Models and Approaches

Through our examination of trends and ideas presented in the scholarship of instructional design, we identified an opening in the conversation around the topic of collaboration and inter-

institutional networking opportunities. In addition, examining trends in instructional design reveals the unique interdisciplinary and intersectional nature of instructional design work, granting further credence to the importance of collaboration and sharing of ideas. Given that the work that we are proposing is centered around communication and collaboration, continuing to build a model based solely on instructional design theory will omit an opportunity to draw on ideas from different disciplines and traditions, particularly those investigated in communication studies, organizational theory, and technical communication: An agile model that promotes the cross-institutional collaboration process, particularly with handling complex requests from faculty and subject-matter experts, is paramount.

Proposed Model for Inter-Institutional Collaboration of Instructional Design Projects

The theories and models presented in the literature review are used to better understand the relationships and productivity of organizational units, but they lack a framework that positions them within an inter-institutional, collaborative space. Building on the work of Giles and Ogay (2007), we have constructed a model that marries communication support theories, specifically communication accommodation theory, with instructional design and collaboration approaches to demonstrate the potential of inter-institutional cooperation. The goal of this model is to assist institutions and instructional designers in identifying and managing opportunities for inter-institutional collaboration.

Model Organization

The combined theories and collaboration approaches create a sequential model that allows users to move seamlessly from one "Step" to another. The model can be used in its entirety or be broken down into specific stages to support defined projects, at the discretion of the collaboration team. The titles and contexts for each "Step" were determined by us, the

instructional designers, after reviewing the scholarship and basing it on experiences managing tasks and determining workflow processes. The "Step" presented in the left column articulates our vision for task and project management. The "Relational-Level" column expands on and interrogates the relationship within the communicative context. The "Task-Level" column connects the relational level to instructional design projects and opportunities. Last, the "Collaboration" column contains suggestions for cross-institutional support and professional collaboration to respond to and develop solutions to instructional design projects. While each section provides context for the project team to be able to question their process and gives questions for considering how inter-institutional collaboration can be infused into an existing process, the "Collaboration" segment of the model presents prompts and questions to consider when communicating and working together cross-institutionally.

Steps in Project Workflow

The model contains steps towards completing a collaborative work process. A good workflow model should contain a series of milestones that allows collaborators to determine next steps and address potential problems (Rothwell, 2015). This model contains six "Steps": identify, analyze, determine, manage tasks, project workflow begins, and project completion. The first step is to identify the socio-historical context, which requires the designers to acknowledge the requestor's position in the higher education institution, experiences with instructional design and technology, and feelings of apprehension towards change (Chen et al., 2018; Garcia-Morales et al., 2018). This prepares the designers to build a successful rapport with the requestor. Second, the designers analyze the requestor's placement on a point of convergence and divergence scale (Neumann & Kopcha, 2018). A competent designer's communication is used in ways that recognize how the requestor perceives instructional design experience and critique as these

potential points of convergence or divergence and adjusts their approach to working with the

requestor appropriately (Neumann & Kopcha, 2018). These first two steps necessitate

communication competency and may account for the success or failure of the communication

interaction between the designers and the requestor.

Following analysis, the designers determine the needs of the faculty requesting

assistance. Identifying the specific needs of the faculty member is particularly helpful during this

step and asking pointed questions to identify the specific issues or problems in need of resolution

can enhance efficiency. Following the acquiescence of the problems, the designers establish a set

of tasks and plans to address the requestor's needs. This work can be done collaboratively to

determine the best course of action using all available resources. Then, project workflow begins,

which includes setting project milestones and a communication plan. The final step in this

process is project completion, which centers on reflecting on the project workflow, identifying

areas of potential review and improvement, and eliciting feedback from stakeholders.

Table 1

Model of application of inter-institutional collaboration to support instructional design work.

Step	Relational-Level	Task-Level	Collaboration
Project or Task Management	*Perspectives from Communication and Organizational Theory*	*Considerations for the Instructional Design Process*	*Opportunities for Cross-Institutional Support*
Identify the socio-historical context	Understand the socio-historical context of the requestor's message and context. Situational knowledge helps identify the best way to proceed with problem-solving (Chen et al., 2018; Garcia-Morales et al., 2018).	Has the instructor had frustrations with technology/teaching before bringing to their interaction and request? Perhaps they have had terrible past experiences with someone in the instructional design position. What is their	Identify contexts and plans for approaching similar and different convergence/divergence behaviors among faculty at other institutions.

		comfort level with adopting new technologies, and what processes could be employed to better support different teaching and learning approaches? (Kuhlenschmidt, 2010)	
Analyze where the requester falls on a convergence/ divergence scale	Analyze the barometer of the level of social distance between the interactants due to the socio-historical context (Giles & Ogay, 2007). Reference Roger's innovation framework to determine where the requestor falls: innovators, early adopters, late adopters, or laggards (2010).	Are there perceived points of divergence? Are there points of perceived convergence? This determines the way accommodation should be communicated. Which frameworks and models of support may fit the situation? (Kebaetse & Sims, 2016)	What methods have instructional design teams implemented at different institutions to address problems and to resolve ongoing challenges? What are meaningful channels of sharing this information cross-institutionally?
Determine the needs of the faculty	Identify the specific needs of the instructor based on their request. Situate requests based on models of prioritization (Batson & Feinberg 2008 and Chen et al., 2018).	Which project management strategies could be implemented to support faculty members? (Rothwell, 2015 and Williams van Rooij, 2010)	Share different needs of faculty and methods of addressing problems and tasks efficiently. Discussion of tools and approaches used at different institutions may provide insight into ways to improve processes. Exemplars and models of success can be shared at this stage, as well as failures and untested potential opportunities.
Manage tasks by determining the next steps to solving the	Identify the tasks required to solve the problem, including determining immediacy, if research is required,	Composing a list of tasks with the instructor ensures that the instructor perceives the design process as	Establish shared models of communication and task prioritization that can benefit instructional designers at different

problem	and setting project milestones (Chen et al., 2018). Communication categories to be addressed include immediacy, impact on the receiver's processes, and planning/mapping tasks, and relational planes.	collaborative and not transactional (Giles & Ogay, 2007). Determine steps to lead to accommodation based on divergence or convergence behaviors and decipher when the task needs to be completed and how it affects workflow (Giles & Ogay, 2007).	institutions. Share lessons learned from successful and unsuccessful project management experiences—investigation and review of collaboration models (Kline & Barker, 2012).
Project workflow begins	The instructional designer engages in convergence signals throughout the process to accommodate by using a wide range of linguistic, paralinguistic, and nonverbal features to become more similar to their sender's behavior (Giles & Ogay, 2007).	Work on completing the project while managing individual and team tasks. Application of project management strategies to instructional design projects (Williams van Rooij, 2010). Follow-up emails, phone calls, and other assurances are utilized.	Share project timelines and duties to synergize efforts to support faculty at both institutions. Investigate opportunities for inter-institutional collaboration on shared resources (e.g., document libraries, training information).
Project completion	Upon completion of the task, the goal should be to establish a convergence dynamic with the sender so interactants are more comfortable working together in the future. Consider lessons learned and integration of lived experiences (Neumann & Kopcha, 2018).	Review the project and identify opportunities to improve the process. Results of successful project completion should increase the designer's social capital and influence at an institutional level (Rottman, 2008).	Completed projects shared inter-institutionally increase the designers' social capital and influence inter-institutionally (Rottman, 2008).

The combination of strategic communication behaviors with management of instructional design tasks with concurrent inter-institutional collaboration facilitates a dynamic process of problem-solving with cross-institutional colleagues that can deliver meaningful results in

supporting faculty and subject-matter experts. The model demonstrates how these relationships

and tasks at different levels interact, though the model implies a linear design and adherence to

this process, instructional designers may choose to employ specific aspects of the model at

different stages in the design process or engage with multiple aspects simultaneously. By

introducing each "Step" associated with the model, then presenting the model itself, the intent is

to inform about the process of relationship-establishment, task orientation, and inter-institutional

collaboration upon receipt of the request.

The management and assignment of tasks of instructional designers at the institutional

level should be clearly articulated early in the process to ensure effective and meaningful

collaboration. The opportunity to network with instructional designers from other institutions,

particularly through the lens of this model, allows for a more efficient and rewarding experience

that benefits the instructional designers, faculty, and subject-matter experts alike. While the

model presents a structure for understanding how this collaboration can work, each instructional

designer and institution will need to test and determine how the various components of the model

could fit within their workflow to benefit their processes.

Sample Model Application

As an illustration of how this model can work, if an instructional design unit from an

institution were interested in developing a professional development program, they could join

with colleagues from another institution to create a joint project, drawing on their shared

experiences and ideas. The table below demonstrates how each step could be applied in this

scenario.

Table 2

Application of inter-institutional collaboration model on developing a new professional development program.

Step	Relational-Level	Task-Level	Collaboration
Project or Task Management	*Perspectives from Communication and Organizational Theory*	*Considerations for the Instructional Design Process*	*Opportunities for Cross-Institutional Support*
Identify the socio-historical context	What programs and professional development have been offered by each institution in the past? What can be brought forth for new programming?	What was the feedback to those programs? What are the requirements for starting new programs?	What are the opportunities for collaboration? How can tasks be divided up so that both institutions can benefit from the collaboration?
Analyze where the requester falls on a convergence/ divergence scale	What can each institution provide in terms of ideas and support for this project to benefit both institutions?	What programs have already been developed and implemented? What are the individual needs of each institution?	How can the team map individual and shared needs to better understand how development can be efficiently streamlined across a cross-institutional team?
Determine the needs of the faculty	What is the best method of collecting information from and including the faculty perspective on a professional development program?	What are the specific goals and outcomes of the professional development program?	How do the needs of faculty overlap between each institution? What are the differences? Will a collaborative effort support a new program?
Manage tasks by determining	What tasks will be required to complete the professional	What standards does the team need to develop to ensure consistency in	How will each team member be assigned tasks on the project

the next steps to solving the problem	development offering(s)? How can the team members participate in creating a road map/development plan for the program?	developing materials and content? How can tasks be chunked into meaningful segments for the instructional design team?	plan? What are the expectations for the communication flow related to project tasks?
Project workflow begins	How will the team monitor and manage communication between the instructional design team and the faculty?	How will the project team build the project and continue to implement project management strategies to manage communication?	How will the team communicate milestones and expectations from the team members and the institutions?
Project completion	What worked and what didn't for the program as part of the collaborative project?	What form of share-out for the project will be done for stakeholders, including reviewing the opportunities and challenges of a cross-institutional collaboration?	How will the evaluation and revision phase of the project allow for the team to make adjustments for future projects?

Practical Experience with the Model

Our experiences as instructional designers who have actively engaged in a collaborative

approach to projects and tasks have directly informed both how we crafted this model and how

we imagined it could be applied. To expand on this application, in our development of

professional development opportunities, we have shared our experiences with different

programming ideas and provided examples of past programs with participant feedback and future

ideas (analyze and identify), supported each other in the mapping of faculty and institutional

needs to potential programming (determine), created tasks and milestones for our independent

projects and supports for each other (manage tasks and workflow), and finally reviewed

programs and opportunities to provide guidance and ideas for moving forward (project completion). Through this collaborative process, we have enhanced our programming and our methods of support through the direct input of a colleague from another institution. This feedback created an opportunity for a critical review of offerings and opportunities while simultaneously adding another layer of support for developing ideas for future endeavors and projects.

Conclusion

This article establishes a model for integrating cross-institutional collaboration into the instructional design process by providing opportunities for instructional designers to network professionally, share ideas, and develop peer support networks to work through ideas and solutions to projects. The proposed model can be referenced and leveraged at the relational, task, or collaboration level, though these processes can occur simultaneously. Instructional designers should reference the model to ascertain effective communication behaviors to apply to their interpersonal relationships with faculty and subject-matter experts and review the collaborative recommendations to elevate their support network to an inter-institutional level.

We present this as the first step to better understanding this process; while this model is based on literature in instructional design, communication studies, technical communication, and organizational theory, additional work is needed to test this model in different instructional design projects to determine how this framework could be applied in different contexts and to further our understanding of how instructional designers can participate in collaborative problem-solving and program development. Specific studies that pilot the model and commentate on its structure and framing are needed. Additional interdisciplinary devices may need to be applied to contribute to the model's robustness. We hope that this model serves as a

call to engage instructional designers in professional, inter-institutional collaborative discussions

about their work process that will enrich their experiences and those they support.

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