



Sigma Delta Tau Instructional System Design (SDTISD) Model

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EME 601 Introduction to Instructional Design

ISD Process Model

INTRODUCTION

Upon completion of a preliminary assessment, it has been decided by Sigma Delta Tau leadership that a process model revision is required to optimize performance and close the gaps in the current volunteer education practices. As it stands, SDT does not currently have a structured process for analyzing training requirements or designing educational programs for their large volunteer base. Through the development of an ISD process model, an internal team of subject matter experts will be able to design effective instructional programming. These improved programs will cultivate a well-trained staff that will be better prepared to support the organization's mission and purpose. In the creation of this model, the following considerations have been taken into account; the core values and culture, fiscal responsibility, efficient use of human resources, and the complex structural hierarchy of the organization. This new process will bring interdisciplinary teams together achieve learning objectives and improve system output.

SETTING

Organizational Structure

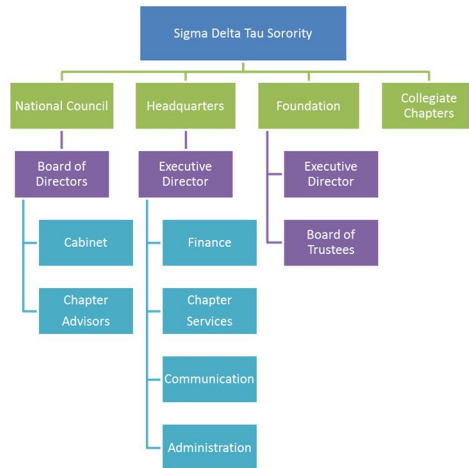
Sigma Delta Tau is a National women's social sorority, founded in 1917, at Cornell University by seven women who faced religious discrimination. The society is now comprised of 63 active chapters with 5000 undergraduate affiliates and over 60,000 alumnae members. The mission of the organization is, "to enrich the lifetime experience of women of similar ideals, to build lasting friendships, and to foster personal growth. Sigma Delta Tau shall encourage each member to reach her fullest potential by providing intellectual, philanthropic, leadership and social opportunities within a framework of mutual respect and high ethical standards."

The organization has four main goals, which are derived from their mission statement and organizational purpose. The first of these objectives is to promote academic achievement within each member by providing a multitude of intellectual opportunities. They also strive to instill a sense of philanthropy and community engagement. Through their partnerships with organizations such as, Prevent Child Abuse America and Women for Women international, SDT hopes to engage all members in their mission to Empower Women. The third goal of the sorority is to build leadership skills and allow each member to nurture her individual talents. Finally, SDT strives to foster lifelong bonds of sisterhood and to create and international network of empowered women.

Sigma Delta Tau is comprised of several, easily isolated, subsystems; including Collegiate Chapters, National Headquarters, National Council and the SDT Foundation. The undergraduate chapters are supported administratively by the centrally located National Headquarters in Carmel, Indiana. The small office staff of 6 provides supplies, processes incoming requests, tracks chapter administrative functions and collects membership dues. All society business functions are controlled by

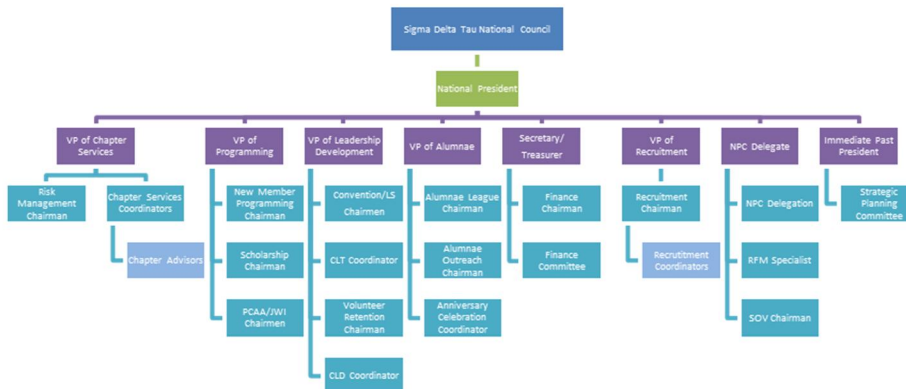
the Headquarters staff, including finances, public relations/communication, and the employment of Leadership Consultants for chapter support. The National Council is the governance subsystem and directs the day to day activities of the organization, as well as all strategic planning initiatives. The SDT Foundation is the charitable wing of Sigma Delta Tau, providing support through programming, scholarships and alumnae networking.

Figure I: Sigma Delta Tau Organizational Structure



This not for profit organization relies heavily on the support of alumnae volunteers to sustain daily operations. Currently, the society maintains a network of over 100 dedicated volunteers, serving in a variety of roles including programming development, leadership training, chapter services, membership recruitment and strategic planning. These various sectors of chapter support are enveloped under the National Council umbrella.

Figure II: Sigma Delta Tau National Council Structure

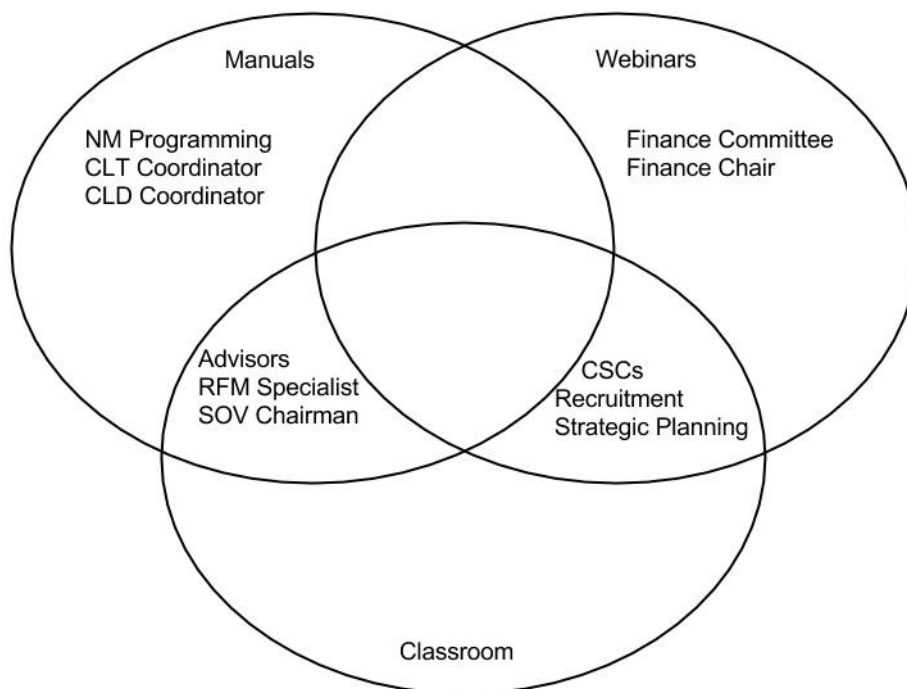


PROBLEM ANALYSIS

Current State

An appointed training department does not currently exist, leaving the development of curriculum to be facilitated, implemented and assessed by the individual SDT subsystems. For instance, if the perceived need arises to develop instruction for chapter finances and budgeting, it would be the responsibility of the National Treasurer and her team to create and distribute the curriculum. Sigma Delta Tau does not currently have a dedicated individual, paid or volunteer, focused on the development of meaningful instruction. Current delivery methods include training manuals, webinars, and classroom instruction during annual leadership conclaves. Sigma Delta Tau would benefit greatly from a formalized process that could help the organization be better prepared to serve its internal and external customers.

Figure III: Sigma Delta Tau National Council Training Resources



The following positions are not afforded any formal training opportunities in their particular area of operations: Board of Directors, Risk Management, Scholarship, PCAA/JWI, Convention/Leadership School, Volunteer Retention, Alumnae League, Alumnae Outreach, Anniversary Celebration, and the NPC Delegation.

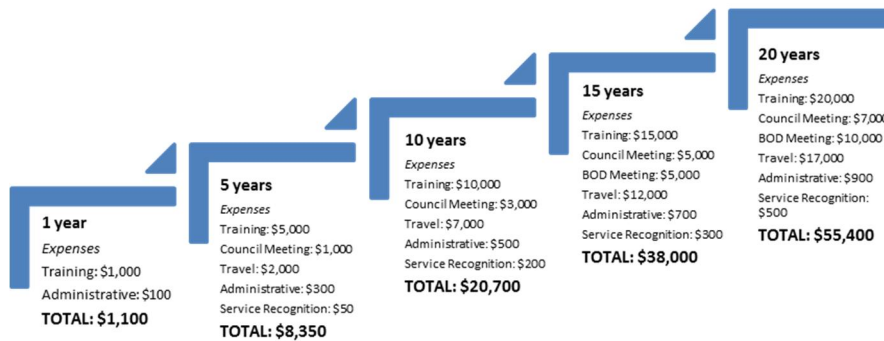
Over the past five years, the SDT governing body has experienced rapid growth with the addition of over 60 new members. However, they have not been quite as successful in retaining existing volunteers, which can be attributed to their lack of development opportunities.

Figure IV: SDT Volunteer Years of Service

| Years of Service | # of Volunteers |
|------------------|-----------------|
| less than 1 year | 20 |
| 1-5 years | 40 |
| 5-10 years | 12 |
| 10-15 years | 10 |
| 15-20 years | 7 |
| 20+ years | 15 |

The initial cost of bringing in new personnel is not substantially higher than retaining existing members, as a comprehensive training program does not currently exist. However, the loss of a volunteer with 5 years of experience poses a significant cost to the organization, both financial and developmental.

Figure V: SDT Career Ladder Cost Analysis



Even more costly is the maintenance of insufficiently trained volunteers. When a member of the National Council has disengaged and neglects her responsibilities, it takes a remarkable toll on the chapters she supports, as well as the organization as a whole. Over the past decade, SDT has doubled their paid collegiate services staff to supplement volunteer appointments.

Figure V: Leadership Consultant Cost Analysis

| Leadership Consultant Data | 2004 | 2014 |
|----------------------------|---------------------|---------------------|
| # of Employees | 2 FT, 1 PT | 6 FT |
| # of Chapters | 57 | 63 |
| # of Colonies | 3 | 1 |
| Salary | \$59,000.00 | \$140,000.00 |
| Travel | \$52,000.00 | \$124,800.00 |
| Meals | \$16,250.00 | \$39,000.00 |
| Administrative | \$3,000.00 | \$6,000.00 |
| TOTAL | \$130,250.00 | \$309,800.00 |

Under-supported chapters perform significantly worse than chapters with a strong local advisory board and a positive relationship with the National Organization. All seven of the 2014 *Diamond Award* winners, who represent the top 10% of collegiate chapters, have a dedicated on-site volunteer providing a high level of support. Conversely, over the past two years, there has been a 100% increase in the number of groups placed on a probationary status by either the SDT Board of Directors or University Conduct Boards. None of these groups have had consistent National support prior to their sanctions.

The number of individual collegiate complaints, as compiled through the annual Chapter Services survey and periodic visit reports, has also increased. Many undergraduate women feel that National representatives do not have the ability to provide the support required and are often unable to adequately assist with chapter issues. As expected, grievances expressed by volunteers have also been witnessed at increasing levels. Members have cited insufficient training, lack of support, and unmanageable workloads as reasons for becoming disconnected from the organization.

An investigation conducted by the organization through a preliminary training assessment has uncovered the following issues:

1. The identity of the SDT volunteer is vague, especially in the 1-5 year range. National Council members are not provided with clear enough guidelines or expectations to be effective in their roles. If job parameters have been communicated, there is often a lack of follow through or constructive feedback.
2. A formalized training program for new volunteers does not exist. Individuals are not adequately prepared to manage basic chapter issues and must resort to a 'trial by fire' style of learning. Continuing development for the 5-10 year range is also lacking, leading to disengagement and eventual attrition.

3. Sigma Delta Tau has not taken advantage of available technology to streamline processes and provide necessary resources to volunteer staff and collegiate chapters.

Ideal State

1. All members of the Sigma Delta Tau system; undergraduate, alumnae, and professional staff would be provided with honest expectations and guidelines. With their identity clearly defined, they would be better connected to the organization and more effective in their individual roles.
2. A systematic approach to training for new volunteers would be implemented and supplemented with continuing education for returning National Council members. With extensive knowledge on how to support their chapters and formalized best practices, volunteers will feel comfortable in their respective roles and collegians will receive the support they require.
3. The organization would take advantage of current technology resources, including cloud based solutions, video conferencing, and sophisticated database products. By providing the most updated resources and making them accessible to all appropriate personnel, the organization becomes more efficient and generates substantial cost savings.

With the implementation of a systems approach to instructional design, volunteers will be better prepared for their positions, individual performance would improve and overall morale will increase, resulting in higher volunteer retention rates and achievement of learning objectives.

RECOMMENDATIONS

Model Origins

The Sigma Delta Tau Instructional System Design (SDTISD) model is adapted from a combination of the Gentry Instructional Project Development & Management (IPDM) model and the Diamond model, with additional opportunities for evaluation included in the process.

Figure V: Gentry IPDM Model

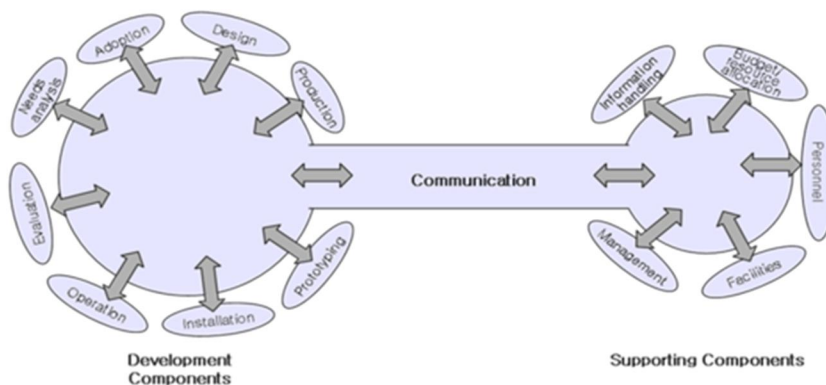
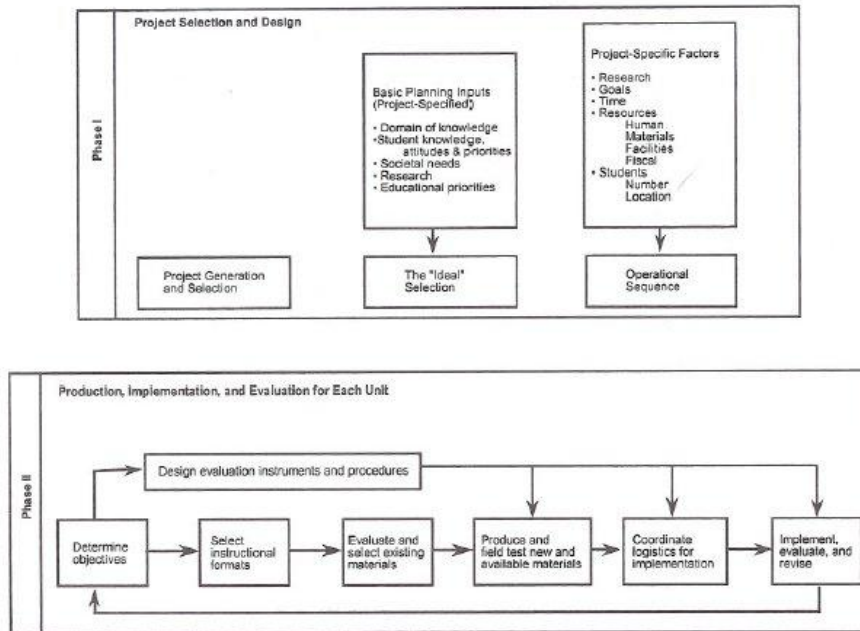


Figure VI: Diamond Model



These foundational models were selected for their taxonomy and focus on front end analysis. Systems-oriented models “usually begin with a data collection phase to determine the feasibility and the desirability of developing an instructional solution” (Gustafson & Branch, 2002, p. 45).

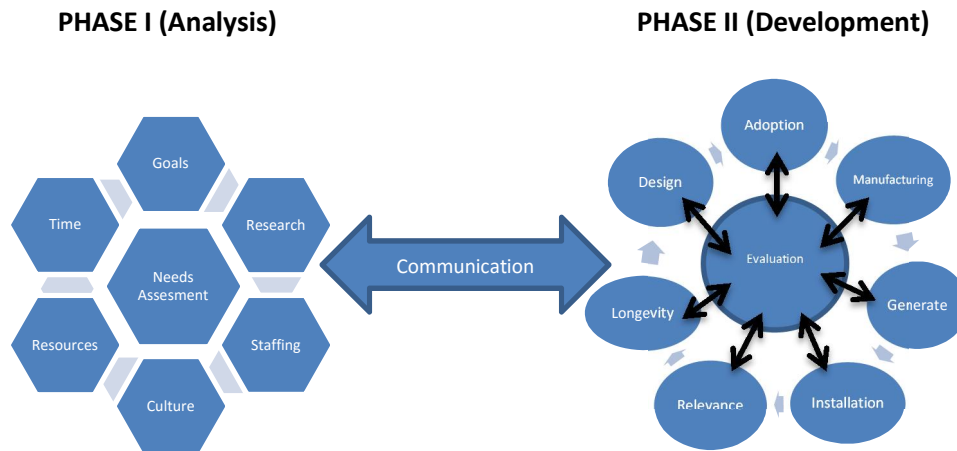
Figure VII: Model Foundation Rationale

| Gentry (IPDM) Model | Diamond Model |
|---|--|
| <ul style="list-style-type: none"> • Attends to <i>what</i> and <i>how</i> something needs to be done • Easy to follow; intended for novice designers • Emphasis on communication through the life of the instructional development project • Behavioristic orientation | <ul style="list-style-type: none"> • Specific to higher education • Focus on development as a team effort • Concern that the development effort is consistent with the organizational mission and priorities • “Outside the Box” thinking; strive for the ideal as to not limit creative solutions |

Sigma Delta Tau Instructional System Design (SDTISD) Model

The SDTISD model has two primary phases, analysis and development. These two phases are interconnected through continuous communication and opportunities for revalidation of priorities to ensure the needs of the organization are being satisfied by the project.

Figure VIII: Sigma Delta Tau Instructional System Design (SDTISD) Model



PHASE I

A thorough needs assessment will uncover precisely what the human performance problem is, whom it affects, how it affects them, and what results are to be achieved by instruction. Within the needs assessment, the instructional designer will establish objectives, identify the target audience, select sampling procedures, decide on appropriate data collection methods, specify instruments and protocols, choose methods of data analysis, and describe how decisions will be made based on the data (Rothwell & Kazanas, 2004, p.67).

'Phase I' consists of a comprehensive analysis of the problem by taking into account the following factors:



What are the organizational/departmental priorities and mission? Would the goals of SDT/the department be supported by the development of a new training initiative/s?

A Learner Analysis should be completed, either derived or contrived depending on the situation, to decipher who the subjects are and in what sort of environment they will be learning. Through creation of a learner profile, the instructional designer will be able develop appropriate material for the target audience.



What is the current research supporting in relation to the organizational problem?
Does the research support instruction as a solution to the issue?



What is the current environment of the system? What are the current environments of the suprasystems that SDT is embedded in? Would the culture of the system/subsystem/suprasystem support the development of a new training initiative/s?

A Work Setting Analysis prior to the start of training development will save the team issues long term as it will take into account the resources available, any logistical constraints in place and the culture of the organization.



What time constraints will the ISD team face as they work to develop instruction? What other projects are currently in the works that may pull the designers away from the proposed development project?



What human resources are available to the ISD team? How many volunteers/staff members will be required to effectively develop the new instruction? What other projects are these individuals committed to?

Depending on the situation and time constraints, a Job/Task Analysis may be required.



What technology is available to the ISD team? How much money has been allocated to this project? What resources exist internally/externally that could be modified to solve this issue?

The analysis phase is presented as a honeycomb to represent the non-linear nature of the assessment. Priorities may be assessed in any order, as determined by the ISD team.

The primary reason for this phase is to ensure that the problem is related to a training need and not some other organizational deficiency. It is vital to select the best solution for the individual issue, because all subsequent steps or decisions in the instructional design process depend on the results of the analysis. Also, the design team will be able to determine if all factors are in place to set the project up for success.

PHASE II

'Phase II' is focused on the development of materials as determined by the results of the needs assessment and primary analysis. There are seven steps in the process, with each component separated by an evaluation. These easy to follow steps were created to provide guidance to an internal team of subject matter experts, who have little to no experience in instructional design. The vernacular chosen mimics wording from previously created strategic planning documents and the acronym for the development process is identical to the familiar listing of the organization's founding members, DAMGIRL.

Step 1: Design



The Design component results in a blueprint based on the outcomes of the Phase I analysis. It is during the process of design that the ISD team and internal subject matter experts work together to determine the desired outcome of the training. The design process cannot even begin without both roles accounted for, as they bring two entirely separate skill sets to the table. It is of the utmost importance to have both content and design specialists working hand-in-hand in order to achieve learning objectives.

As in the Diamond model, it is recommended that the design process be approached with an open mind and a focus on the ideal solution. The argument is, "that by thinking in ideal terms, a team will be more creative and innovative in outlining powerful solutions" (Gustafson & Branch, 2002, p. 56). These solutions can later be scaled back to reflect the realistic parameters of the project.

That being said, currently available training resources should be explored prior to generating new materials. Both internal and external documents may be able to be modified to meet the needs of the organization. The National Panhellenic Conference and other adjacent systems, have a plethora of easily modifiable materials available. Due to resource constraints, production of new instruction should only be attempted when it is not possible to adapt existing materials.

The main deliverable of this step is to write the course objectives, select the media type, create outlines for instruction, establish performance metrics and develop instructional strategies.

Step 2: Adoption



At the end of the day, every instructional design endeavor has two target audiences, the performers and the key decision makers (Rothwell & Kazanas, 2004, p.68). During the second step of the model, the ISD team will establish acceptance from Sigma Delta Tau decision makers, including the National President and Executive Director. It is important for the team to know their audience, as individual biases and personal values will play a role in the final decision. Both the results of the preliminary analysis and blueprint created in Step 1 should be presented for approval. At this point, the team will also need to solidify what sort of resources will be committed to the project, both human and financial.

Step 3: Manufacturing



It is during the Manufacturing stage that construction of the instructional unit begins, as specified by the original design and any revisions made during the previous step. The complete instructional package should contain the following four distinct components (Dick & Carey, 1990):

Learner directions and guide sheets – These detailed instructions explain how to use the instructional package and provide the learner with guidance in absence of an instructor. However, in a classroom setting, a manual with specific directions may be appropriate.

Instructional materials- This component contains the ‘meat and potatoes’ of the unit, including all text and visual aids.

Tests – The broad label is meant to encompass all student evaluation tools including pre-tests, progress reports, final assessments, as well as any post-instruction follow up at a later date.

Instructor directions or guide sheets – The final element includes the corresponding procedural guides used to aid the instructor in delivering instruction. These will be especially significant in this model, as the individual leading the course will virtually never be a representative from the design team.

Step 4: Generate



The Generation step is when the prototype is assembled, pilot tested and validated. The sample population should be determined via a random stratified sampling of the target audience. When working with a singular specialized population, such as particular age demographic or specific years of service, the team will need to proceed with caution when interpreting the pilot test results. Although the data will yield specific information on how to adapt training to individual needs, it will also contain biases and skew the results. The prototype should also be reviewed by external subject matter experts, if possible, to validate effectiveness. If an external expert is not available, a managerial review of materials will suffice.

Step 5: Installation



Once the instructional materials have been authenticated, the unit is ready for production. During the Installation phase, the product is implemented and available for use by all appropriate personnel within the organization.

Step 6: Relevance



It is important that the ISD team maintains the product post-installation and ensures that the design remains relevant to the needs of the organization. Continued monitoring of human performance metrics will be required throughout the life of the unit of instruction. If and when the subject matter becomes ineffective or obsolete, the material will need to be either revised or replaced.

Step 7: Longevity



The Longevity component provides a formalized assessment of the instructional content and allows the ISD team to collect, analyze, and summarize course data. This information will be used to confirm that learning objectives are being met and to inform later revision decisions.

Again, buy-in from key decision makers and those affected by the course material will be required at the conclusion of the training initiative.

The following groups will need to be taken into account, according to proper evaluation procedures (Rothwell & Kazanas, 2004, p.293):

Key Decision Makers –SDT leadership, including the National President and Executive Director will be interested in how well the curriculum met the previously identified instructional needs of the organization. They may also want to see concrete examples of human performance improvement in addition to a detailed cost-benefit analysis

Immediate Supervisors of Targeted Learners – The Sigma Delta Tau Board of Directors will be interested in the same results as the key decision makers. However, as a working board responsible for supervising volunteers at varying levels of the organization, they will want to familiarize themselves with the training in order to better support their staff and hold individuals accountable for performance objectives.

Targeted Learners- National Council Chairmen and Advisors will be the benefactors of most of the training designed through use of the SDTISD model. The learners will primarily be concerned with how well the content met their personal needs and how they will be able to apply the knowledge gained in the future.

Figure IX: Sample Course Evaluation

1. Please rate your level of satisfaction with the following elements of the course (mark your selection with an 'X':

| | EXTREMELY SATISFIED | SATISFIED | NEUTRAL | DISSATISFIED | EXTREMELY DISSATISFIED |
|-------------------------|---------------------|-----------|---------|--------------|------------------------|
| Quality of the Course | | | | | |
| Instructor Preparedness | | | | | |
| Quality of Materials | | | | | |

| | | | | | |
|--------------------------|--|--|--|--|--|
| Feedback from Instructor | | | | | |
| Pace of Course | | | | | |

2. What course materials did you find most helpful and relevant?
3. List 3 things you learned from this course that you did not know before taking it.
4. How likely are you to recommend this course to your colleagues/peers?
5. What would you do to improve the course?

Evaluation



Formative evaluation must be considered between each step of the Development phase, to ensure that production is on track and remains aligned with organizational objectives. It is important to approach the evaluation of the course materials with the understanding three fundamental assumptions (Rothwell & Kazanas, 2004, p.290). The first is that instructional methods, as well as materials, should be evaluated prior to widespread dissemination in order to minimize learner confusion. The second assumption approaches evaluation as an exercise of human judgment. The instructional design team will need to proceed with caution as they interpret the results of the evaluations. The final notion held by most instructional designers is that it is an essential part of the process to review and revise materials based on actual experience with learners.

Communication



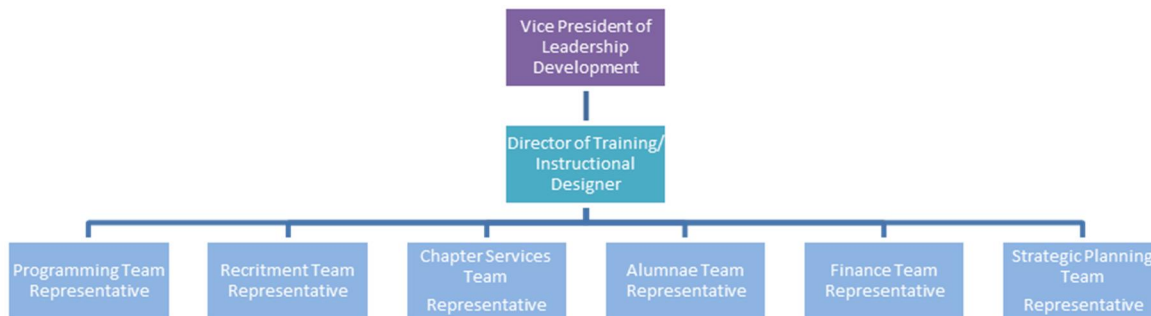
As with the evaluation process, it is important to note the continuous cycle of information conveyance throughout the instructional design process. As in the IPDM Model, the communication component is the “process by which essential information is distributed and circulated amongst those responsible for or involved in the activities of a project” (Gentry, 1994, p.5).

The culture of fraternity and sorority life is evolving rapidly, as is the internal atmosphere of Sigma Delta Tau. It is important that the instruction designed reflects these changes and remains consistent with the values, mission, and goals of the system in which it operates.

Resource Implications

At this moment, it is not possible for Sigma Delta Tau to hire additional staff to support an instructional design initiative. However, what the organization lacks in trained ISD personnel, they make up for in dedicated volunteers and subject matter experts. Until the resources are made available to employ a full time Training Director, the organization will need to appoint a team of National Council members to serve in this capacity.

Figure X: Sigma Delta Tau ISD Team Structure



This multidisciplinary team will be responsible for creation of new materials, from preliminary analysis to program evaluation. The team oriented approach will also help streamline operations in other areas of society business and foster better communication between the Sigma Delta Tau sub-systems.

CONCLUSIONS

Obstacles

Staffing has always been, and will always be, an issue for Sigma Delta Tau. Even with the creation of a multidisciplinary training team, there will still be performance gaps based on varied commitment levels and lacking accountability standards. In addition, each member of the committee will have responsibilities outside the realm of training to attend to. It will be a major challenge for the newly appointed Training Director/ Instructional Designer to effectively manage her team to achieve the desired results.

Generational issues and how they are managed will also play a role in the success or failure of this initiative. SDT National Council volunteers range from Millennials to Baby Boomers to women approaching their 75th year of service to the organization. Juggling their various training needs and

experience using technology will be a struggle as the team works to develop curriculum that is accessible to all members.

Cost Benefit Analysis

In order to validate the SDTISD model and justify the allocation of additional resources to the project, the Training Director/ Instructional Designer and her team will need to conduct a detailed cost-benefit analysis, within six months of the first full cycle of the process. The hope is that the enhanced training program will create more adequately trained volunteers, who will in turn be more engaged with the organization and better prepared to serve in their appointed roles. If implemented correctly, the results of the final evaluation will provide the information needed to justify any project expenditures and will demonstrate that the improved training initiatives carry tangible benefits for organization.

SDTISD Model Approach Summary

The proposed model provides a ton of flexibility in its approach with enough guidance to support even the most novice designer. It is designed to include multiple small steps with a series of checks and balances. Even if a mistake is made, it will be easy for the team to circle back and correct the error before any long term damage to the integrity of the project is done.

The Sigma Delta Tau Instructional Design Model will prove to be even more effective under the direction of a qualified, ISD professional with the support of a team of dedicated internal subject matter experts.

By utilizing this new model, SDT will be able to deliver robust training resources for all volunteers through a variety of mediums, improve human performance, and advance the objectives of the organization as a whole.

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