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Design planner: An Interactive guide for design planning

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DESIGN PLANNER®
an interactive guide for design planning

ROCHESTER INSTITUTE OF TECHNOLOGY

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Thank You

Bette Lu & Roy Prochaska for supporting my every whim with enthusiasm, and for forgiving my mistakes, as well as helping me right my wrongs. For never telling me I 'couldn't.' For simply, and literally, always being there.

Roger Remington for all that he has taught me, and his neverending passion for learning and teaching. For his personal and professional support.

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Dedication

This thesis is dedicated to those persons everywhere who had the courage to set a goal and sacrifice to see the dream brought to fruition.

To those who uphold the value that hard work is good.

To those who have new ideas and put forth the effort necessary to better a given situation.

To those who believe in a well-rounded education and recognize the importance of an interdisciplinary approach to learning.

To those who enjoy thinking.
Preface

As the time grew near to formulate a thesis project that would be the culmination of my graduate education at Rochester Institute of Technology my thought process turned inward to seek out what it was that I could contribute to the field of Graphic Design. What was it that interested me? What about the profession hadn't yet been addressed? What resources were available here at RIT that would facilitate a truly unique and powerful Graduate Thesis? Most importantly, what was the problem I would help to solve through an entire year of intense investigation?

My first thought was that "there was an excessive amount of ineffective / bad design currently being produced." How could I change that situation? With the help of my major professor, R. Roger Remington, I was able to articulate the problem in the form of a thesis project. (Appendix 1 & 2) Considering the great wealth of resources RIT had to offer in the areas of interactive media, design evaluation, project planning and management, and the department's emphasis on design as a problem solving process, I chose to develop an interactive media application dealing with design planning and management.

Through the development of Design Planner I felt that, ultimately, I could improve the quality of graphic communications by providing a planning tool for designers, students of design, and professionals, to assist in developing a project proposal for any creative endeavor. The application would help users adopt a problem solving approach, and define goals, objectives, success indicators, and processes and strategies of implementation. Through the proposal development process a designer would become very well acquainted with the problem at hand, the constraints, and the communication objectives of the client. As a result the designer would be better prepared to develop a truly effective solution for the problem at hand.

It seemed that perhaps the problem was not in the degree of skill designers had, but rather how they applied their knowledge to each creative task. Measuring the effectiveness of a creative product is difficult at best, and impossible if certain criteria aren't established that can be used to evaluate the product's relative success. By developing a detailed proposal for a project task, a designer is helping him/herself to better understand the problem at hand, the client's needs, the needs of the audience, the communication objectives, the constraints, etc. Through this process a designer is able to prioritize the activities necessary to achieve success in the final solution. Prioritization allows for focus on key areas of importance, and the development of goals, objectives, and a process by which to meet the demands of the task at hand. Focus and emphasis are then placed on the critical issues relating to an effective solution for the problem, and success indicators relative to each objective are then formulated.
Introduction

Design Planner®, is an interactive planning tool for the process of design. It is a computer based application that was developed using HyperCard 2.0 authoring software by Apple®. The application runs on a Macintosh workstation, and an accompanying manual has been developed to assist users when working with the interface. The application is available for use at the Media Resource Center in the Wallace Memorial Library on the campus of Rochester Institute of Technology.

Design Planner is a tool that enables users to develop a project proposal for any given task. The application functions as both a learning and a production tool. The process of writing a proposal leads users through informative text with examples that detail the necessary elements within each component of a successful proposal. By using the application users are taught how to formulate an effective project mission statement, goals, objectives, indicators of success, and processes and strategies of implementation. The interface allows users to actually enter their own project-specific text for each of the aforementioned steps in the proposal. Through a dynamic and interactive process users of the application have the option of making revisions to their proposal at all times and of saving their work as a HyperCard stack, or as a text file for use in a word-processing application. Users can also print a finished proposal through the interface, print copies of important textual information, and print certain cards from the application for use as guidelines when a workstation is not available.

Design Planner begins with an introduction that explains the application and the way to navigate through the information. As well, it includes animated illustrations that demonstrate the broader context of project planning, evaluation, and management activities in general. (Appendix 8.1) Also included in the introduction is an animated sequence depicting the various stages in the process of developing a proposal with the application and the way each stage in this process supports the others. Users are also exposed to an organizational flowchart that illustrates the many components within the application. The flowchart also functions as a navigator map by allowing users to access specific information by clicking on the area they wish to view.

After completing the introduction users are prompted to move to the first step in the proposal development process: the mission statement. By clicking buttons on the screen the user moves in a linear fashion through textual information describing the process of articulating an effective project mission statement. At the conclusion of the informative text the user is allowed to write a mission statement for his/her particular project. A template structure for an effective mission statement is provided for reference, as well as a summary of the previous information. Options that allow the user to print the card for use as a
notetaking device away from the interface, see an example, or review the informative text are also available at this time. Upon writing a mission statement the user is prompted to move on and learn about writing an effective goal. As in the mission statement area, the process of learning what makes a goal successful and how to write one is repeated through textual information. This process is standardized throughout the five major components within the application. A standardized operation which the application provides is the return of previously written information. In other words, after writing a mission statement and learning how to articulate an effective goal, the user is again allowed to write project specific information, goals in this case, with the aid of a template. The mission statement the user has just written is then provided for reference to ensure goals are written to satisfy the mission. (Appendix 8.3)

This process is standard throughout the application. In the next steps in the process the user will write: 1) objectives to satisfy the goals, 2) indicators of success in relation to the objectives, and 3) a process and strategy of implementation that will define how the designer plans to achieve all of the above. This function is very powerful because it establishes a problem solving approach to the design process, ensuring that the designer addresses each issue with the overall project objectives in mind. This process subdivides the project into several smaller problems to be solved sequentially and, by doing so, produces a natural hierarchy.

After completing the five major components of the application and having written a mission statement, goals, objectives, success indicators, and a process and strategy of implementation, the user can view the proposal in its entirety. The user can also title the proposal or make any necessary changes. Also, the user can print a copy of the document, save it for later use, or move back into the body of the application for instruction in any area, and then make revisions. It should be noted that the process outlined above is the anticipated interaction for a first time user. Through the navigator map a user may access, at any time, any part of the application's functionality or text.

Design Planner utilizes the metaphor of building to illustrate the dynamic process established in the interface. A brick was chosen as the appropriate metaphor because of its adaptability. The brick represents one small part of a larger whole. This provides focus at the micro level. When seen in context it represents the whole, or the broader picture, at the macro level, while retaining the meaning of the single unit. Finally, the brick inherently represents a building process, an orderly evolution from one small entity to a much larger outcome. The metaphor is applied throughout the interface and plays a major role in the identity system, and the organizational structure of each visual layout including the Macintosh screen design, the user manual, the promotional posters, and also this document.
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Research and Development

The Thesis Committee met formally for the first time on 10/8/91 for the purpose of defining the project and opening a dialogue. Those present were: Deborah Beardslee, Mark Collien, Dr. Charles Plummer, Roy Prochaska Jr., and R. Roger Remington. It was decided that the project outcome would be an interactive media application developed using HyperCard 2.0 that would approach the evaluation of design as a process of writing a project proposal defining relevant goals, objectives, and processes and strategies of implementation. The task at hand was to develop an interface that would allow users to improve the effectiveness of their own design product through the use of a design project planning and management tool.

Each committee member was asked to express concerns about the project at this early developmental stage in order to fully utilize the expertise each person brought to the group. Dr. Plummer was intrigued by the project itself and seemed most interested in the synthesis and application of several evaluation strategies within the application. He also stressed that the final interactive outcome should adopt a dynamic / cyclical process of revision and development. All agreed the final solution should utilize an appropriate metaphor; however, many reservations were expressed. Mark Collien was most concerned with the effective use of metaphor, citing many instances of improper applications. Deborah Beardslee suggested (and all agreed) that a simple to complex approach would be the best way to gradually lead users into the application. The ultimate solution seemed to be structuring the information in multiple levels from very simple to complex. Roger Remington mentioned many concerns with the interface development. One was that the application focus on the process of designing rather than on the design product itself, and that the final solution be very clearly targeted to do one thing only, and do it well. It was the opinion of the committee that parameters needed to be established in order to ensure all efforts were focused on accomplishing the project's specific objectives.

At the conclusion of the meeting I made a careful review of all that had been discussed and began my research. (Appendix 2,3, & 4) Dr. Plummer was able to provide several documents on evaluation procedures and, also, to refer me to other sources of information. Roger Remington and Deborah Beardslee also provided very useful information throughout the project. My research focused on: design evaluation, design process, and system development and analysis (including project goals, objectives, success indicators, and processes and strategies of implementation), but also included interactive media design applications, graphic design criticism and education, multi-level writing, evaluation methods, and problem seeking and solving techniques.
Professor Jorge Frascara of the University of Edmonton at Alberta, CA and I share a very similar philosophy toward effective design and, as a result, I contacted him for possible input in regards to the project. He was more than gracious in granting permission to quote his work, and in taking the time to provide me with documentation of many yet unpublished articles he had been working on.
Identity System Development

An identity system was necessary in order to reinforce the metaphor adopted within the interactive application and provide a common visual context between the computer interface and printed materials. The early development of the identity mark included the use of several problem solving tools: key word listings, visual and verbal representational matrices, identity mark classification systems, and mind-mapping. (Appendix 5) By using the tools mentioned above I was able to decide on an appropriate visual metaphor for the actual Design Planner application.

The metaphor needed to illustrate the theory adopted by the application with regard to the process of design: that of a step by step problem solving approach to reaching an effective visual communication solution. I chose a brick as the metaphor due to what it could signify and, also, because of its inherent adaptability. A single brick represents a piece of a larger whole, seemingly small in stature, yet of great importance to the overall structure. Each brick performs a distinct role in support of the whole. A group of bricks represents a finished product rather than the process used to achieve the result. Lastly, the brick itself represents part of a process, a process by which many small pieces are brought together to form a whole. The process is dynamic and cyclical, beginning with one brick, then two, then three, etc. until the final solution is reached.

A system of bricks relates to the process utilized by the Design Planner application by providing a visual representation of each sub-section of the application, while also providing insight as to the many parts functioning together. (Appendix 8.1) Each area of the application is a separate entity in its own right, but also functions in context with the other elements. No one area is of more importance than another, and eliminating any step in the project planning and management process used by Design Planner would render the application ineffective. A single brick relates to an individual step in the process. A group of bricks represents the completed proposal with many interrelated parts, and the stacking of bricks relates to the dynamic project development process. Each category or brick exists to support another.

The final identity mark was the result of a careful ideation and image development process. (Appendix 6) The process involved experimentation with possible solutions to integrate the project's name "Design Planner" with a single rectangular form, representational of a brick. Later this unit was extended into a system of rectangular forms. Experimentation involved utilizing typographic variables with other formal considerations such as line, shape, figure / ground relationships, and continuity in an attempt to establish the successful integration of form and typography. After a successful visual relationship had been established, I began to develop variations on the mark...
that would unify an identity system comprised of several applications of the mark.
Flexibility was an issue of concern in the development of the identity system. The identity needed to be consistent, recognizable, and adaptable to an interactive computer application, printed promotional posters, a user manual, and this the final thesis documentation; therefore, after experimentation with variations of the final mark, two final solutions were realized. The final mark solutions consisted of: 1) an opaque rectangular form with the letters 'Plan' reversed out in white followed by positive letters 'ner' below a positive 'Design', and 2) the rectangular brick form implied by retaining the top horizontal border with a thin rule, and the right edge of the brick implied with a somewhat thicker rule. This 'line' (2) version of the mark proved to be aesthetically cohesive and recognizable as a variation on the 'form' (1) version of the identity mark. (Appendix 6) It also retained the unity established between the implied form and the typography. This solution was then applied in the user manual. (Appendix 11)
Preliminary Application Development

An organizational flowchart is an essential component in the development of any interactive media application. It is necessary due to the choice of media / a computer. Unlike traditional media an interactive application is not a tangible / physical product as is a book or a poster. An interactive application lives in a non-linear, electronic environment. An organizational flowchart provides visual reference to each of the many components in a given application. It illustrates how each component functions within an application and explains its purpose and location in relation to the whole. (Appendix 3 & 8.1)

I looked to R. Remington, M. Collien, & C. Plummer for expertise in the area of flowchart development. It was my intention that the flowchart would eventually become the layout of the application, so great efforts were put forth by the entire committee in designing an effective structure. The process began in October, 1991 and wasn’t fully complete until the middle of February, 1992. (Appendix 3) Input from the committee focused on relating the Design Planner application to a broader project planning and management process, developing a dynamic organizational hierarchy within the flowchart, and in integrating each component of a successful project proposal. (Appendix 8.1) As the application evolved it became apparent that it was very important that the application begin simply and gain in complexity based on prior steps. It was also crucial that the process be cyclical and allow for continual refinement of the proposal. A final solution for the flowchart was applied in the introduction of the interactive application and functioned as an illustration of the interrelationship of the components. The chart also functioned as a navigational tool through the use of scripting buttons on each of the illustrated components. The buttons allow users complete navigational freedom within the application, making it a highly interactive interface.

In addition to designing an organizational structure for the informational contents of the application, the preliminary developmental stages also focused on establishing the visual layout, applying the identity mark and system, determining the necessary navigational tools, and how each component of the flowchart would be developed in relation to the whole through the use of HyperCard. I chose to create eight Hypercard stacks that would work together to become Design Planner. (Appendix 8)

Five of the eight stacks would form the body of the application and accordingly house the majority of the textual information. These were designated as areas where the user actually wrote his/her own project proposals through a series of ordered steps. The five main stacks are: Mission Statement, Goals, Objectives, Indicators of Success, and Processes and Strategies of Implementation. (Appendix 8.2-6) The three remaining stacks would each perform a specific function. One was to be a 'teaser' that would repeat a short brick layering
animation sequence to attract user interest. The second was to house the introductory text for the actual application, including instructions for use and animated sequences to demonstrate the relationship of Design Planner to the broader context of project planning and management activities, and to illustrate the dynamic developmental process utilized by the application. (Appendix 8.1) The last stack, the 'Print' stack, was to be the area in which users could view their proposal with all of its components in place. (Appendix 8.7) In this stack users are afforded several options. They can print a copy of the completed proposal, save a copy for later reference, (as a HyperCard stack, or for use in a word-processing application), add specific titling information for the proposal, or return to the body of the application to make further refinements.

The next issue I addressed was the visual interface. After experimentation and refinement, I chose to apply the identity mark in the upper left corner of each card. The visual field was then divided into four categories. A thin margin (25% of the screen width) below the identity mark was reserved for the vertical height of the screen for supplemental text, instructions, reminders, helpful hints, etc. The main portion of the screen was then dedicated to main body copy and for fields in which users would enter data. This area is separated from the 'help' area to its left by a vertical rule unified with the mark by a connecting horizontal rule. Directly below the main card text area, running along the bottom of each card are the navigational buttons that allow users to move freely between each of the five major components within the application. This greatly enhances the dynamic process stressed by the application. The lower left corner of the Macintosh screen, below the supplemental text area, always contains the main navigational buttons. Buttons deemed necessary allow the user to step forward, step backward, return to the previous card viewed, return to the navigator map, quit the application, edit textual information within each major category, print copies of cards and fields, print copies of a completed project proposal, and save a copy of the proposal in HyperCard or for use in a word processing program. (Appendices 8-8.7)
Application Refinement

Upon completing the developmental stages of the interface, its organization and functionality, I began to transform each section of the organizational chart from a concept to a functioning HyperCard stack. This process involved many steps. Initial priorities included input of the textual information and the production of the opening animated sequences. (Appendix 8.1)

The animation sequences in the introductory portion of Design Planner were included to illustrate and provide reference to a total systems plan utilized by Dr. Plummer to divide and relate the different steps in the project planning, evaluation, and management processes. The purpose for including the sequences was to show a user the broader context of which the application is a part, and to demonstrate how each stage in the evolutionary process used by the application fulfills a necessary requirement in a successful proposal. The pre-established total systems plan developed by Dr. Plummer was adapted to the Design Planner application and modified to suit the needs of a creative planning tool. The diagram was then termed "The Creative Planning Process" diagram.

A second animated sequence included in the introduction explains "The Design Planner Process" and follows the "Creative Planning Process" diagram. Through the order in which the diagrams are presented, users are introduced to the broader context of project planning and management activities, and then provided with a description of the process they will soon begin, and its relation to the broader picture. The design planner process is a representation of the way in which each component of a project proposal supports the others to form a whole. It also provides reference to the evolution of a proposal through its various stages. The brick metaphor is applied in this sequence to demonstrate how the application allows the user to build a proposal. (Appendix 8.1)

The text included in the application is designed to function as a learning device by providing users with the necessary information to gain an understanding of each step in the process, but also provides helpful hints, summaries, and examples. It is the result of a synthesis of information derived from many different fields of study. My research included design evaluation, process, and methodology, project planning, management and evaluation activities, goal setting, writing of objectives, and human interface design. After the data was actually entered in text fields in each of the appropriate stacks, I began to make refinements to the narrative. The text was revised and edited four times with input on content and proofreading assistance from R. Remington and D. Beardslee. (Appendix 7) During the refinement of the text content, a multi-level writing system using typographic variables such as size, posture, weight, etc. was implemented to form a hierarchy within the information. This approach was adopted to prioritize the content of the text and emphasize key
points, while downplaying issues of lesser importance. Studies in perceptual psychology have shown that this method facilitates an effective transferral of both content and emphasis by providing visual clues for the reader as to what is the most important information, what is secondary, etc.

As the refinement continued, it became apparent that some alterations in the interface structure and layout would be necessary. In order to provide feedback for users in regard to their location within the application, a visual coding system was applied to buttons and fields. Depending upon which component of the application the user was in (goals, mission, etc.) the button for that particular section was reversed so that the button appeared black with white type. This helps to eliminate any confusion on the user's part with regard to his/her location within the application. The use of reversed type as a coding device was also applied to 'active' cards. The cards on which the user needs to enter his/her own project specific information are considered active because they call for user action. Other cards that provide information are considered passive since the user is only reading and not physically performing. The title at the top of each active card is also reversed as mentioned previously as are the field headings, and all supplemental buttons, example, print notes, etc. The coding system on active cards provides a visual clue to users that they are to perform a specific action on that particular card before moving on.

(Appendix 8-8.7)

Other changes made at this stage of revision included minor changes in the selection of typefaces and the addition of new buttons on certain cards of Design Planner. Modifications in type styles cleared up problems of legibility on the Macintosh screen. Buttons allowing the user the options of printing an entire card, or a specific field, a worksheet, or to see an example were added on the active cards within each of the five major components. Lastly, buttons were added to allow the user the option of saving his/her proposal as a HyperCard stack or as a text file that can later be accessed through any standard word-processing application (Macintosh, or DOS).
Thesis Exhibition

I chose to exhibit the Design Planner® application in the first of three theses shows in the spring of 1992. The show was scheduled from March 9-26, with the opening reception scheduled for Friday, March 13, from 7 to 9 pm.

I realized well in advance of the show date that the management of the Bevier Gallery would only allow me to have a Macintosh workstation in the gallery for one night, the formal opening on March 13. This forced me to complete the interface by the 13th for exhibition, and also left ample time for revision of the project following the exhibition prior to graduation. It was apparent that there would not be sufficient time prior to the opening to develop a user's manual for the exhibition, so I elected to design two posters to accompany the workstation and remain on display throughout the period of the exhibit. The posters contained a printed visual display of the identity system which included descriptive text about the application's purpose and benefits and provided insight into the future of interactive media applications in a general context. (Appendix 9)
User Manual Development

The user manual evolved out of the fully refined application. Its purpose is to provide written support for users to reference when using Design Planner. It is a complementary resource to the application.

The layout of the user manual is based on the same organizational method developed for the computer based application. Spatial relationships between items in the printed user manual and the on-screen interface are similar and provide unity throughout the identity system. The identity mark is applied throughout the manual, and the treatment of typography and graphics is similar to the screen treatments in the application. The process of developing the manual involved all members of the committee and considerable refinement. (Appendix 10)

The user manual contains two major categories of information: 1) an introduction and 2) a specific description including visual examples of each major component within the application. (Appendix 11) The introduction includes information concerning the necessary software needed to run Design Planner, as well as release information. Basic instruction is provided for users not familiar with the HyperCard environment. A statement concerning the purpose, benefits, context, and philosophy of the application is also included. Additional reference is provided in the form of a bibliography and credits near the end of the manual.

Specific instructions are included to demonstrate how a user will receive maximum benefits through use of the application. An introduction to the functionality of buttons, cards, and fields used in the interface prefaces a detailing of each component in the application. Detailed information is provided in six subdivisions: Mission Statement, Goals, Objectives, Indicators of Success, Processes and Strategies of Implementation, and Print. Each area provides the user with examples and instruction in order to properly utilize the application’s capabilities.
Evaluation Procedures

Design Planner® was evaluated on several levels and at different phases of development. Formative evaluation continued throughout the process through meetings with D. Beardslee and R. Remington. This method helped to monitor progress during the process and also to keep the aforementioned aware of possible problematic areas. Included in the formative evaluation procedures were periodic meetings with M. Collien and Dr. Plummer, each adding helpful suggestions with regard to their particular areas of specialty. In addition to the individualized meetings just mentioned, the full committee met twice during the development of the application to discuss progress, pitfalls, and the visual interface itself. Also used as an evaluation tool throughout the process was my Thesis Project Timeline (Appendix 4). The timeline was very helpful in scheduling, prioritizing, and monitoring progress.

Summative evaluation techniques included meetings with individual committee members, user testing, and evaluating the finished application and supporting materials with the original goals and objectives set forth in the Thesis Proposal. (Appendix 2) During meetings with committee members the Thesis Project as a whole was discussed in terms of its success, its relative stage of completion, and the role the Design Planner at RIT after my graduation. The project as a whole is successful at meeting the goal and objective requirements articulated in the Thesis Proposal. I have come to realize that the computer application itself is in a prototype stage and in need of continued refinement and testing. However it is successful in that it does function and can be utilized by a user to develop a project proposal. Design Planner will be used by both undergraduate and graduate students through the Graphic Design Department and the Media Resource Center to develop thorough project planning documents.

User testing included demonstrations with students from a variety of backgrounds: Computer Science, Computer Graphics Design, Graphic Design, Glass, Interactive Media Design, Metals, and Simulation System Experts. The purpose of demonstrating the application to students with such a diverse range of specialization was to ensure that the interface did, in fact, assist users in developing a project plan and was understandable and effective to both experts in the field as well as those with relatively little computer experience. Feedback from each of the students tested was then implemented in order to facilitate a more effective final product.

Student response was generally very positive. Those tested and others I spoke with about the application were genuinely excited about the functionality of the application, as well as the theoretical concept underlying the project. Many students quickly recognized how they could use and benefit from Design Planner in their own creative process. Most expressed an eagerness to utilize the application as a tool to articulate upcoming project proposals ranging from planning a Graduate Thesis to applying for a Fellowship, or developing a proposal for a publicly funded sculpture competition.
Conclusion

I feel that Design Planner® is highly successful in terms of my original goals and objectives. There is no question as to whether or not the idea was worthy of a Graduate Thesis project. The prototype application is the first of its kind. The idea of design evaluation translated to an effective problem solving tool is innovative, and the media with which the message is delivered is still in its developmental stages and will play a major role in the transferal of information in the future. Interactive media design is only beginning to be truly understood and applied in many fields. At the time of this writing, articles are being written about how crucial effective design planning can be to a business. Also being mentioned frequently in both scholarly and professional circles is the fact that designers need to be more able to articulate and adapt their process in such a way that it is justifiable to industry. Design Planner will satisfy both of the aforementioned needs with the aid of a new technology. The project was truly unique in both concept and media.

The development of my thesis project was an exciting experience and will relate directly to my interests in professional practice. (Effective design is essential, in my opinion, but without a means of articulating how and why, a client will benefit from quality design a designer's role is devalued.) I have learned a great deal through my study of graphic design history. The most important lesson I learned is that a designer needs to be a 'Renaissance Person' in the sense that he/she must be able to analyze, synthesize, and apply input from a wide variety of disciplines in his/her work. The designer must be able to interact and articulate his/her skills in relation to industry, must also be a communicator with a strong command of any and all media at his/her disposal, must be selective in choosing the most effective means of delivering a message, be aware of the consequences of the message sent, and be prepared to measure the success of the work in order to validate its necessity.

As I begin to look back on the thesis project, I'm continually excited by what I was able to accomplish with the assistance of my committee, a truly innovative and inspiring project, one that could never have been realized in professional practice due to the lack of time and resources. This is in perfect accord with my view of a graduate level education. I hoped that my Thesis project would result in a product that would be truly unique and powerful, an idea brought to fruition through an interdisciplinary approach to learning, one that is a synthesis of many inputs resulting in a new and exciting product, a project that challenges existing theories with a new and perhaps more appropriate thesis, a body of work that re-examines the process of what the field is all about, what it could be about, and what it is. I believe it is the duty of a graduate student to provide new insight into his/her respective field, for the profession hasn't time to deal with such scholarly endeavors, and others simply aren't qualified.
### Glossary

**Aesthetics** - of or relating to the beauty in art or nature.

**Analysis** - the separation of a whole into its parts or elements, *opposite to synthesis*

**Appropriateness** - suitable for or belonging to the person, or circumstance.

**Articulate** - to express in words, also; arranged with coherence, interrelated.

**Communicate** - to transmit or exchange thought or knowledge.

**Computer Application** - a tool designed to perform a specific task through the use of a computer.

**Conceptual** - that which is conceived or devised mentally: a concept, idea, plan or design.

**Conditions** - an event, or fact, necessary to the occurrence of another.

**Criterion** - a standard or rule by which a judgment can be made, a test.

**Disseminate** - to scatter, diffuse far and wide.

**Design (process)** - a step-by-step process of research, planning, and execution by which a creative solution is arrived at.

**Design (evaluation)** - a process that measures the relative success of a creative product in terms of the communication needs that facilitated the project to begin with, and the overall aesthetic qualities of the work.

**Dynamic** - producing or involving change or action.

**Effective** - producing the proper result, efficient.

**Evaluate** - to find or determine the amount, worth, value, to appraise.

**Explicit** - plainly expressed, clear, developed in detail, not implied.

**Formative** - evaluation at the intermediate stages of a project.

**Goal** - something toward which effort is directed; an end or an objective.

**Hierarchy** - a group arranged in successive orders or classes, each of which is subject to or dependent on the one above it.

**HyperCard** - authoring software for the Macintosh platform by Apple®.

**buttons** - screen objects that allow for user navigation.

**fields** - on screen containers for text.

**cards** - equivalent to a new 'page' in a linear format.

**stacks** - equivalent to a new book in a linear format.

**Hypermedia** - a non-linear method of information transferral.

**Implicit** - implied or understood, but not specifically expressed.
Interactive Media - a technology that allows the user to make specific choices about how and in what order he/she wishes to access the information.

Interface - a liaison between two or more persons, objects, tools.
Invoke - to call upon, appeal to, or summon the assistance of.
Legible - readily perceived or discovered from apparent signs or evidence, capable of being read or deciphered.
Linear - extension in one dimension only, pertaining to length.
Metaphor - a figure of speech in which one object is likened to another by speaking of it as if it were that other.
Mission Statement - a broad statement of intent with regard to a task.
Multi-level writing - a system in which typographic variables are used to prioritize and emphasize appropriate words, phrases, or locations.
Multimedia - drawing from more than one medium, ie: sound, video, animation, drawing, etc.
Objective - that which is striven for or aimed at.
Organizational Flowchart - a diagram used to visualize the many parts of a computer application.
Performance - an act, deed, or accomplishment, a manner of operating or functioning.
Prioritize - to establish a hierarchy from most to least important.
Process - a course or method of operations in the production of something.
Project Proposal - a document describing: a problem, the methods by which it will be solved, by whom, when, where, why, and how; also including relevant deadlines, and any budgetary concerns.
Success - a favorable or desired outcome of something attempted.
Success Indicator - that which will point to the successful completion of a goal or objective.
Summative Evaluation - terminal evaluation concerned with the comparative worth or effectiveness.
Synthesis - the assembling of separate or subordinate parts into a whole, opposed to analysis.
System - orderly combination or arrangement of parts, elements, etc., into a whole; especially such combination according to some rational principle, also a synonym for computer.
Template - a pattern or gauge used in shaping or building something.
Visual Coding - a system in which certain elements are assigned specific attributes for the purpose of separating them from others.

Visual Interface - pertaining to computer applications; referring to the aesthetic qualities of the screen layout, including transitions, animation, and the functionality of tools provided.
Bibliography


Moyer, Karen. The Hierarchy Project. Carnegie Mellon University, Department of Graphic Design.

Nadin, Dr. Mihai & Ockerse, Thomas. Interpretant Matrix. 1990.


Appendix 1

Preliminary Thesis Proposal
Thesis Proposal for the Master of Fine Arts Degree

College of Fine and applied Arts
Rochester Institute of Technology

Submitted by: Roy J. Prochaska Jr. Date: 9.20.91

Thesis Committee:
Chief Advisor: R. Roger Remington
Associate Advisors: 1.) Dr. Charles Plummer
  2.) Mr. Mark Collien

Departmental Approval:
(signature of graduate faculty member) Date: 9.20.91

Approval, Special Assistant
(to the Dean of Graduate Affairs):
(signature of Special Assistant to the Dean) Date: 9.20.91

Computer needs other than word processing:

Yes X No___

I will need a Macintosh computer with a hard drive, software packages including Hypercard, Macromind Director, Adobe Illustrator, Quark XPress, and a laser disc player, a video digitizer, a color Macintosh monitor, an NTSC Monitor, possibly a sound recorder, and the ability to use all of the above for the opening of my given Thesis exhibit.
Title: Design Evaluation Tool

I propose to develop an interactive media program about design evaluation, and an identity system to represent the aforementioned for my MFA Thesis project. The project outcomes will be a computer based interactive media program with a project identity and manual.
Thesis Project Proposal
Roy Prochaska Jr.
Version 7.0, 11.13.91

1. Project Title: Design Evaluator

2. Client: Rochester Institute of Technology, Department of Graphic Design
One Lomb Memorial Drive, PO Box 9887, Rochester NY 14623

428 Clay Road (A), Rochester NY, 14623.
8730 Nashville, Oak Lawn IL, 60453.

4. Problem
   Statement: In the context of the profession of graphic design there is no tool
designers and others can utilize that will help clarify and define a problem, and outline a process that will effectively solve the problem.

   Audience: Professional graphic designers, design educators, design
students, and clients of the aforementioned.
5. Documentation

of Need, Situation Analysis:

In order for designers to be able to evaluate, judge, and produce design based on common standards there must be a system that will enable designers, educators, professionals, clients and students alike to discuss design in terms of its true effectiveness, rather than elaborate on the opinions of others. This system should approach 'design' as a process of determining what the real problem is, setting goals for an effective solution, and determining objectives that must be met. Such a system will benefit the:

A). Designer; by defining a problem clearly, thus allowing for focus, and a 'guideline' of how to go about solving the problem at hand.  
B). Profession; by defining the process of design explicitly, allowing for discussion, dissemination, criticism and evaluation based on sound criteria.  
C). Society; by facilitating more efficient, and effective communications.

6. Goals:

6.1 Provide a standardized format by which design can be evaluated, explained, critiqued, judged, discussed, and disseminated.  
6.2 Provide the user with a friendly, and highly interactive interface.  
6.3 Provide a user manual complete with a project identity for the user.  
6.4 Provide a template structure that can be applied to a wide variety
of design problems and will convert the design problem to a
process to follow in order to produce an effective solution.

6.5 Help the user define explicitly what is to be achieved with a given
product.

6.6 Allow for a broad to narrow, or fuzzy to clear operational process.

6.7 Utilize an appropriate metaphor (onion, coach, parent,
government, conscious)

6.8 Allow for flexibility.

6.9 Ensure that the designer has considered appropriate cultural,
societal, technological, environmental, and economic issues.

6.10 Define objectives in behavioral terms. (Tylerian model)

6.11 Present evaluation information to the designer in an easily usable,
effective, and non-misleading or confusing manner. (Alkin)

6.12 Provide the user with both Formative and Summative objectives.
(Scriven)

7. Objectives:

The 'Evaluator' tool will enable the user to:

7.1 Write goals and objectives for a given design task.

7.2 Print out a listing of objectives and goals for a given design task.

7.3 Identify a product's effectiveness in relation to the project goals.

7.5 Apply the ten general principles of Human Interface Design as
found in Apple's™ Hypercard Stack Design Guidelines; (listed
below)
7.5a  The use of a clear metaphor with appropriate visual and audio effects can allow users to work with a set of existing expectations and apply those to the new situation.

7.5b  Users need to be able to directly manipulate their environment, and they need visual and audio feedback.

7.5c  It is much easier to “see-and-point” as opposed to remember and type.

7.5d  There needs to be consistency within the following:
* the graphic look
* the arrangement and grouping of buttons
* visual and audio feedback
* card layout
* background for cards with similar functions
* the stack structure

7.5e  The WYSIWYG or (What you see is what you get) structure

The layout of the stack should not be a puzzle to the user.

7.5f  The user must have control of the actions, not the computer. The computer does the work, but the user must be the director of it.

7.5g  Appropriate feedback and dialog allow the user to know what is going on, if a choice is inappropriate at a given time, etc.

Feedback can allow the user to learn from his/her mistakes.

7.5h  Because users generally make mistakes, forgiveness for them must be built into the program.
7.5i A perceived stability allows the user to feel more comfortable and more in control than a program that seems to change at random.

7.5j Aesthetic integrity will enhance the effectiveness of the program.

8. Processes

Strategies:

* Investigate and learn interactive media programs including Hypercard, and M.M. Director.

* Research is to include the purpose of evaluation, its benefits, and shortcomings. Evaluation methodologies, and their applications are also to be investigated.

* After the analysis of many evaluation methods I will synthesize the best and most appropriate methods and formulate an evaluative system designed to meet the projects needs.

* Seek out individuals in professional practice and visiting guests and lecturers that may be able to offer valuable input.

* Demonstrate the 'Evaluator' to student users in order to evaluate progress and effectiveness.

* Focus on the design process, and blending function with aesthetics. (inherently will allow for flexibility)

* The module should begin simply, gain in complexity and detail, and then return back to the beginning of the query process with completed lists of criteria, objectives, goals, constraints, etc.

Dynamic Process.
* Utilize a simple and conceptual metaphorical structure.

9. Timeline:

Under separate cover.

10. Pragmatics:

- The project must be presented at the first Thesis Exhibition on March 13, 1992.
- At the time of the given Thesis exhibition the application will need to be functional, and in the Bevier Gallery. This will obviously require the use of a Macintosh computer with a color monitor, and possibly a videodisc player and other hardware.
- The documentation of the process, or ‘the book’ will be signed by the Thesis Committee, the appropriate Dean’s, and be fully certified by May 23, 1992.

11. Dissemination:

The projects outcomes will be disseminated through the programs accessibility in the Media Resource Center at Rochester Institute of Technology, and also through the use of RIT faculty and students. Efforts will also be made to gain exposure for the module through the American Center for Design, and the American Institute of Graphic Arts.
12. Evaluation:

The projects outcomes will be measured against the above mentioned goals and objectives by myself and the Thesis Committee, progress will be monitored throughout the process. The project will also be demonstrated to and then used by students at RIT, and evaluated by students from various departments including design, interactive media, and computer graphic design, and systems analysis.

13. Bibliography:

Underway under seperate cover.

14. Glossary:

Underway under seperate cover.
CULTURAL

APPROPRIATE FOR TARGET UNIT

ATTITUDES IT ILLICITS

(1) OR (2) TITLE/CLIENT

RRR'S PROJ PROP.

PROBLEM STATEMENT

MODEL/STRATEGY

GOALS

OBJECTIVES

PROCESS/STRATEGY

SOCIETAL

ECONOMIC

NATURAL RESOURCES

ECONOMIC

TECHNOLOGY

APP & GOOD USE OF

ENVIRONMENT

WASTE

OPTIONS

10/19/91
Introduction
- Welcome to the stack

Navigator device
- Title/Client/Designer Information
- Definition of Problem Statement
- Documentation of the Need, or Situation Analysis
- Write Project Goals
- Write Objectives
- Processes/Strategies
- Timeline and Implementation Schedule
- Pragmatic Considerations
- Dissemination
- Evaluation Plan
- Bibliography and Glossary of Terms

Cultural Concerns
- Appropriateness for target Audience
- Positive attitude towards the target culture, conducive towards
- Understanding of sensitivities, and cultural dimensionality (many)
  - Promotes a positive vision,

Society
- Economic Resources
- Natural Resources
- Technology

Environment
- Appropriate, and good use of resources

Minimizing waste
- Exploration of options

Crime prevention
- Injury prevention
- Traffic safety

Discrimination
- Literacy
- Health
- Safety
- Education
- The environment

"DESIGN EVALUATION TOOL"
Introduction

Purpose

What to expect, Outcomes

Navigator

Glossary

Bibliography

Project Title,
Client/Designer Info.

Problem Statement
Definition

DOCUMENTATION
OF NEED? SITUATION
ANALYSIS

WRITE GOALS

WRITE OBJECTIVES

PROCESS

PRAGMATICS

Who the project will
Benefit

Importance of Hierarchy

Megers how to (demo)

Strategies

Timeline

What situation is
Improved upon

Clarify Objectives

Keyword prompts

Appropriateness

Budget

Enter Data

Utopian vision

Enter Data

List of considerations

Production

Essentials
(se constraints)

Enter Data

Enter Data

Distribution
Dissemination

List of considerations

Enter Data

Answer Questions

Enter data

Print Document
**A notetaking device will also be available at all times.**
WRITE OBJECTIVES

Introduction to writing objectives

Purpose and benefits of objectives

Qualities of useful objectives

Importance of well defined objectives

Megers Methods

Performance examples

Conditions examples

Criterion examples

WRITE OBJECTIVES

Keyword listing appears on split-screen
** A notetaking device will also be available at all times.
A note taking device will also be available at all times. "The introduction card will provide information about the process of moving through the stack for a first time user, and also ensure the user starts at the correct point. **A n experienced user will have the option to go directly to a certain area without following the informational hierarchy. Each rectangle in the chart above will also function as a button."
**A notetaking device will also be available at all times.**

**The introduction card will provide information about the process of moving through the stack for a first time user, and also ensure the user starts at the correct point.**

**An experienced user will have the option to go directly to a certain area without following the informational hierarchy.**

Each rectangle in the chart above will also function as a button.
** A notetaking device will also be available at all times.
** The introduction card will provide information about the process of moving through the stack for a first time user, and also ensure the user starts at the correct point.
** A n experience3d user will have the option to go directly to a certain area without following the Informational hierarchy. Each rectangle in the chart above will also function as a button.
Develop a 'Design Evaluation Plan'

Purpose
What to expect, Outcomes
Navigator

Provide a Notetaking device

INTRODUCTION

Client/Designer Meeting
Assess Needs
Set Priorities

Specify Design Criteria
Mission Statement

DOCUMENTATION OF NEED / SITUATION ANALYSIS

Importance of Hierarchy
Help to clarify objectives
Provide a Utopian vision

Begin to consider pragmatic issues
Enter pertinent data

WRITE PROJECT GOALS

Introduction to writing objectives
Purpose & benefits of obj
Qualities of useful obj
Importance of well defined obj

WRITE PROJECTS OBJECTIVES / MAGERS METHODS AS MODEL

Develop a project timeline
Appropriateness
Answer progress query

Develop a project budget
Frasca considerations
Review, Refine, Revise

Consider prod/dist options
Frasca considerations
Implement process plan

PROCESSES AND STRATEGIES
Final version of chart.
Mission Statement

Introduction to writing goals
- Explain the importance of hierarchy
- Provide for a Utopian vision
- Demonstrate the usefulness of goals in writing objectives
- Begin to consider pragmatic issues

Introduction to writing objectives
- Explain the purpose and benefits of project objectives
- The qualities of useful objectives
- Importance of well-defined objectives

Example method
- Performance
- Conditions
- Criteria

Write project Objectives

Teaser Screen

Introduction

The Big Picture

Client Meeting
- Accept, analyze and define problem
- Assess needs
- Determine Priorities
- Specify design criteria

Write a project mission statement

Review sample goals

Write project Goals

Processess and Strategies
- Develop a project timeline
- Develop a project budget
- Determine methods of production and distribution
- Analyze other considerations
  - Problems of Appropriateness
  - J. Frascara inputs
  - J. Frascara cont.

Answer questions
- Review
- Refine
- Revise

Design Planner Navigator

Notetaking Device

Print Design Plan Proposal

*Purpose of the application. What to expect, anticipated outcomes. Bibliography?

**A visual example of the steps involved in the entire project.
Cultural Concerns
- Appropriateness for the target audience 3.32
- Sends a positive message to the target culture 3.33
- Understanding of sensitivities and ethnicity 3.33

Awareness to societal issues
- Crime Prevention 3.411
- Injury Prevention 3.412
- Discrimination 3.413
- Literacy 3.414
- Health 3.415
- Public Safety 3.416
- Education 3.417
- The Environment 3.418

Resource Usage
- Economic Resources 3.511
- Natural Resources 3.512
- Human Resources 3.513
- Technological Resources 3.514
- Environmental Resources 3.515
- Waste minimized 3.612
- Exploration of options 3.613

Design Conscious
Introduction, Explanation

Front Exp
INCLUDE
p.23 from Freeny
God's Fire
Seed Scene movie
"This is Sacred"
Mission Statement

.client meeting
- Accept, analyze and define problem
- Assess needs
- Determine priorities
- Specify design criteria

Write a project mission statement

Design Conscious

Goals

Introduction to writing goals
- Explain the purpose of objectives
- Explain the importance of hierarchy
- Provide for a Utopian vision
- Demonstrate the usefulness of goals in writing objectives
- Begin to consider pragmatic issues

Write project goals

Objectives

Introduction to writing objectives
- Explain the purpose and benefits of project objectives
- The qualities of useful objectives
- Importance of well defined objectives

Review sample goals

Example method
- Performance
- Conditions
- Criteria

Write project objectives

Indicators of Success

List indicators for each objective
- Indicators for objective one
- Indicators for objective two
- Indicators for objective three
- Indicators for objective four

Processes and Strategies

Develop a project timeline

Develop a project budget

Determine methods of production and distribution

Print Design Plan Proposal

*One set of indicators per objective
I. Concept
   Manage
   Design
   Implement
   Evaluate

II. Define
   Why, What
   How, Where, When
   How will you know?
   Process & Strategy
   Indicators of Success

III. Design/Plan Tool
   Mission Statement
   Goals & Objectives

Icons

SD Card

D hen
TOOLS FOR PROJECT DEVELOPMENT

A Picture of a Project.

- Who?
- How will you know?
- Any additions?
- Why & What?
- How, When, & Where?

This diagram's flow follows the logical steps of project design/operation.

PICTURE OF A PROJECT

OPERATE THE PROJECT

1. Manage the Project

2. Design the Project
   - Assess Needs
   - Design
   - Develop/Apply rationale model and/or theory

3. Implement the Project
   - Conduct Activity 1
   - Conduct Activity 2
   - Conduct Activity 3

4. Follow up on Project

5. Evaluate & use info. in Decision Making

Click to return to the previous card.
Appendix 4

Project Timeline
Appendix 5

Identity Mark Development
DESIGN EVALUATION

METAPHOR LISTING

D.E. IS LIKE A:

- WHOLE IS STRONGER - EACH PART SUPPORTED BY THE OTHERS
- PART OF A WHOLE - 97% OF 150% - OBVIOUS IF SOMETHING IS MISSING
- MANY SIMILAR PIECES - ALL PIECES NECESSARY - WEAK IF NOT COMPLETE
- SET AND FAVOR - MODIFY
- DEVELOP GOALS - DO LISTS - REVIEW/REFINE/REVISE
- OPERATIONS - BUDGETING - R&D
- RESOURCES ESTIMATE - ANALYSIS
- MONITOR PROGRESS

- RIGHT/WRONG - RULES - PUNISHMENT
- GOVERNMENT - AUTHORITY - PUNISHMENT - ORDER
- PARENTS - ROLE MODEL - MORALITY
- DO THE RIGHT THING

- ANY FUSED - BINDING ELEMENT - STRENGTH
- PART
- FOUNDATION - STRUCTURE - ORDER
- MUSCLE - LAYING - STAMINA - STRENGTH
- FOUNDATION - STRONG - ORDER
- MANY ELEMENTS - PARTS - Foundation
- MANY PARTS - PIECES OF WHOLE - PARTITION
- DIFFERENT FUNCTIONS

- BUILDING MODEL - PROTOTYPE - ANALYSIS - EVALUATE - REVISIONS - CHANGE

- SomETHING FROM STRENGTH AT A TIME
- UNDERLYING SUPPORT - DEVELOP - SENSE OF STEEP RISING STEP - TO DO
- VERTICALLY - PROCESS - PHTD - HIERARCHY
### Representative Matrix

<table>
<thead>
<tr>
<th>Signifiers</th>
<th>Signified</th>
</tr>
</thead>
</table>
| **Iconic** (Looks Like)     | **Design**  
 |                             | PRINT RECORD  
 |                             | ENTERTAINMENT  
 |                             | SIGN/BRANDING  
 |                             | STRUCTURE  
 |                             | LAYOUT  
 |                             | PLAN  
 | **Indexic** (Points To)     | **Evaluation**  
 |                             | COMPUTATION  
 |                             | CREATIVE  
 |                             | AUDIENCE/USER  
 |                             | SCIENTIFIC METHOD  
 |                             | PREFERENCE/CULTURE  
 |                             | COHESION  
 |                             | UNDERSTAND  
 |                             | FINAL DECISIONS  
 | **Symbolic** (Convention)   | **Critique**  
 |                             | GO/OB/ODD  
 |                             | GOOD/BAD  
 |                             | SUBJECTIVE/SUPRA  
 |                             | SENSES/INSIGHTS  
 |                             | THEORY/ICS  
 |                             | IMPOSSIBLE/SUCCESS  
 |                             | POSITIVE/NORMAL  
 |                             | OBSERVANT/ATTENTIVE  

9/91/Dr. R. Zakia

12/15
# Representational Matrix

<table>
<thead>
<tr>
<th>Signifiers</th>
<th>Foundation</th>
<th>Subdivision</th>
<th>Analyzed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Iconic</strong> (Looks Like)</td>
<td>A building foundation</td>
<td>Bricks, girders, blocks</td>
<td>Matemat</td>
</tr>
<tr>
<td><strong>Indexic</strong> (Points To)</td>
<td>Construction equipment, workers, cement, slabs</td>
<td>Concrete, complex apartment blocks</td>
<td>Perplexed facial expressions, close inspection</td>
</tr>
<tr>
<td><strong>Symbolic</strong> (Convention)</td>
<td>Bricks, girders, cement, truck, strength, muscle</td>
<td>Blueprint, tech. drawings, division split</td>
<td>Mathematical equations, theoretical constructs</td>
</tr>
</tbody>
</table>
Roy Prochaska Jr.
1/11/92
Thesis identity mark development strategy

1.0 Analysis

1.1 Orientation
1.2 Develop keyword listing
1.3 Verbal interpretent matrix
1.4 Visual interpretent matrix
1.5 Appropriateness Analysis with “Trademark Field”, B. Swinehart

2.0 Synthesis

2.2 Develop a strategy for image creation

DEVELOPMENT STRATEGY:

Target mark categories from T.F.
A. Icon, (abstract, representational)
B. Composite Letterform, and representational
C. High Discrimination Wordform

2.3 Develop sketches (marks first, then typography)
2.4 Examine possible merging of several ideas
2.5 Choose a mark to fit one of the above categories
2.6 Refinement
2.7 Implementation
Design Planner

Design Planner

Design Planner

Design Planner

Design Planner

Design Planner

Design Planner

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Design Planner

Design Planner

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Design Planner

Design Planner

Design Planner

Design Planner

Design Planner

Design Planner

Design Planner

Design Planner

Design Planner
Mark 1 Refinement
1/22/92
Marks 4.0, 1/20

Design

Design Planner

Design Planner

Design Planner

Design Planner

Design Planner

Design Planner
Appendix 6

Final Identity Marks
Design

Planner
Design Planner
Design Planner
Design
Planner
Design Planner
Design
Planner
Appendix 7

Text Development and Revision
Welcome to the Design Planner, an interactive planning guide for the process of design. This application was created using Apple software, Hypercard 2.0.

After reading the remainder of the introduction, click the forward arrow to view a sequence designed to provide further insight into the Design Planner and its mission and purpose and how it can help you.

This application will help you to formulate and articulate your design process in a problem solving approach through a series of steps. After using the Design Planner you can expect to have written a project proposal that will include a project mission statement, goals, objectives, indicators of success, processes and strategies. After completing the introduction segment you will arrive at a map illustrating how the each of the many components in this application are related. The map will function as the main navigational tool. At any time you may refer back to the map to select your own path through the information by clicking on a button. Upon completion of your proposal you may save it for later reference, and print a copy for your own personal use, or for a client.

The main navigational buttons appear at the bottom left of the screen, and are represented in the form of "bricks". Click on a brick to activate its functionality, described below.

*MAP* - will bring you to the map, and allow you to navigate throughout the stack.

*BACKWARD ARROW* - will allow you to move backward to the card preceding the one you are currently on.

*FORWARD ARROW* will allow you to move forward to the next card.

*QUIT* - allows you to quickly exit the application.

*LAST* - allows you to return to the card from which you came.

On certain cards the button in the lower right of the navigational area will vary between the following commands:

*EDIT* - will take you directly to the card where you enter text (within each area) ex: click "edit" when in the "Objectives" stack to go to the "Write Objectives" card. This button is most useful when re-entering the application to make changes to your proposal.

*REVIEW* will allow you to go to the first card of the stack you are in. ex: click the "Review" button when working in the "Mission Statement" stack to review the introduction to the process of developing a mission.

*PRINT* the print button will allow you to print a copy of your document, or save a copy for later use.

Upon entering the main portion of the application you will notice a new group of buttons appear directly...
Problem Statement:
In the context of the profession of graphic design there is no tool currently available that will enable a designer to clarify and define a problem, and articulate a process that will produce an effective solution to the problem.

The Design Planner was developed to improve the quality of graphic communications. The thesis I present is this: "Graphic messages are often misunderstood, or inappropriate due to a designer's negligence in understanding the communication objectives of the problem."

In developing this application I hope to contribute to the profession of visual communications by providing a tool that will enable users to produce a document stating explicitly what they intend to accomplish through a project. By following the process outlined in this application the designer will be continually reminded of their goals and objectives as they design, helping to produce an effective solution. Furthermore the Project Proposal the application will render is a powerful design planning and management device, for use in-house and in client interaction.

This interface will bring the entire proposal process to the user in a highly interactive format. Interactivity allows for the user to access information in ways never before possible. By allowing the user to navigate unbounded within the application the interface allows for great flexibility. The Design Planner can be used by a novice to understand the components of, and develop their own project proposal, or by an experienced user to access specific information or make revisions to an existing proposal.

If the application is utilized properly the ensuing project proposal will result in:

- make the designer aware of issues that could influence the design product
- provide for the basis of dialogue with a client (helping to ensure both the designer and the client expect the same outcome, and are working to reach common objectives)
- allow for scheduling and monitoring of the design process, (ensuring the project meets its objectives on time, within the budget)
- allow for monitoring the design process in progress toward the accomplishment of objectives
- help to clarify the project in terms of true communication objectives
- ensure appropriate solutions are arrived at

-- prioritize communication objectives, which translates into a clearly focused message
The project "Mission Statement" is to be articulated in very general terms. It is to be used as a forum in which to state in the broadest of terms what the project will attempt to accomplish. It is also the appropriate place to list generally all that might be accomplished above and beyond specific objectives.

The ideal "Mission Statement" will address the following issues:

**Who, What, When, Where, Why, and How.**

*Who* is the target audience?

*What* will your project do?

*When* will the project be complete?

*Where* will the project be implemented?

*Why* are you proposing the project?

*How* are you going to accomplish the project?

The following may be useful things to consider before you articulate your "Mission Statement."

**Who**: Define any and all possible audiences or any other groups, individuals, or organizations that may have interest or benefit from your work. Who will be involved in the project?

**What**: What is your project, what will it do, what won't it do, what do you think it might do, what do you wish it could do? What will the finished outcome be—mass produced, or only one, one-of-a-kind?

**When**: When will the project be complete, when will it be in prototype stage, when would you like it to be complete?

**Where**: Where will it be: local, regional, national, global, public or private space, exclusive or general access, in several locations (distribution), or a central location.

**Why**: Why are you addressing this issue, what is the problem or situation you feel needs to be altered, what situation are you attempting to improve, why do you think your work is necessary, why is it important to address the issue now?

**How**: How are you going to solve the problem, what techniques, input, sources, technology, funding, etc. will you utilize, how will the finished product look.
In order to conduct yourself professionally from the very outset of a project there is a need for a preliminary meeting with the prospective client. Listed below are some of the many things that need to be considered:

During the initial meeting you should have the client define the project scope, budget, and relative scheduling (deadlines), as well as the existing pre-condition that needs to be augmented, or supplemented. In other words, what is the problem that needs to be fixed? The client provides other relevant input (audience, copy, etc.)

After the client has provided you with information concerning the project you should then consider determining anything additional that you feel needs to be considered at this point. Many times you as a designer are much more sensitive to the possible needs of your prospective client than you may be. Be sure to analyze the situation carefully and to ask any and all relevant questions before accepting a task.

The following Marketing/Communications Analysis was developed by R. Roger Remington and may provide you with some additional information if you are not satisfied with the clients initial input.

1. List the 10 words that best describe the nature or function of your organization.
2. From the words listed above, extract the five most important terms and list in priority.
3. What difference does it make that your organization exists?
4. As you understand it, what is the mission of your organization?
5. On a day-to-day basis, what specific ways do you see this mission becoming operationalized?
6. Forward thinking: list five words that might characterize the personality of your organization in ten years.
7. From your own perspective, please list the key audiences for your organization's public messages.
8. From the list above, please extract the most important and place below in a priority listing.
9. In terms of your personal point-of-view, how do you feel that your audience should perceive your organization. Simplify your answers to one or two words if possible.

The designer (creative manager) develops a schedule and fee estimate that the client deems satisfactory before work ever begins. (The Design Planner is a tool designed to assist in both client interaction and in internal prioritizing of a given task).
After the initial meeting, and once the project has been accepted, it then is the designer's duty to determine the project needs. Only you with the assistance of your creative team will be able to make critical choices about the projects' particular needs.

The following four categories of information should be considered in terms of your project: Design, Audience, Societal, and Resource Concerns. Think of the issues discussed in the aforementioned in terms of the impact they might have on your project. (Assess your projects' needs relative to the constraints they could possibly represent.)

For example: Is there a cultural barrier to be addressed, if so the failure to do so might translate into the alienation of a large portion of your target audience.

The following issues should be considered:

**Design Concerns:**
- Budget
- Client
- Color
- Computer-related work
- Contrast
- Copywriting
- Designer/firm
- Distribution
- Form
- Format
- Freelance Services
- Illustration
- Line
- Photography
- Presentation methods
- Processes and techniques:
- Printing/production
- Shape
- Statistical analysis
- Texture
- Time
- Typography

**Audience Concerns**

**Societal Concerns**

**Resource Concerns**

(need further categorizing)

Function/Use

Pragmatic —

Context

Semantic —

Form

Syntactic —
Issues related to your intended audience need to be critically analyzed to ensure that your message is communicated in the most effective manner. This will eliminate the possibility of miscommunicating, alienating, confusing, or offending a portion of the audience.

The following issues should be considered:

**Audience Concerns:**
- Appropriateness for the target audience.
- Sends a positive (desired) message to the target audience/culture.
- Sends a cohesive and understandable message.
- Exudes an understanding and sensitivity to issues related to ethnicity.
- Consider the possible impact of your message on the public.
- Avoid problems of performance related to visual perception.
- Consider the scope of your project: local, regional, national, or international.
Assess Needs: Audience Concerns

Issues related to your intended audience need to be critically analyzed to ensure that your message is communicated in the most effective manner. This will eliminate the possibility of miscommunication, alienation, confusion, or offending a portion of the audience.

The following issues should be considered:

Audience Concerns:
- Appropriateness for the target audience.
- Sends a positive (desired) message to the target audience/culture.
- Sends a cohesive and understandable message.
- Exudes an understanding and sensitivity to issues related to ethnicity.
- Consider the possible impact of your message on the public.
- Avoid problems of performance related to visual perception.

Mr. Frascara is a professor of Graphic Design at the University of Alberta in Edmonton, Alberta, Canada. He is a past president of the International Council of Graphic Design Associations, (ICOGRADA).
As visual communicators we have the power to inform, influence, persuade, educate, and affect the general public with our messages. Our messages communicate on many levels: conscious, sub-conscious, un-conscious, literal, metaphorical, etc. The messages we send are also affected by the surrounding context, the medium, their timeliness, etc. As a result of the power we as communicators have, it is critical we are abreast of "Societal Concerns" that may affect the meaning or interpretation of our work.

The following are topics that should be considered:

**Societal Concerns:**
- AIDS
- Animal rights
- Crime Prevention
- Discrimination
- Economy
- Education
- The Environment
- Global / International Issues
- Health
- Injury Prevention
- Literacy
- Political Climate
- Public Safety
- Solar power

See prior comments.
As designers we initiate the use of vast amounts of paper and other substances that are products of irreplaceable natural resources. It is important that designers be aware of this fact, and that much of what we produce eventually will become garbage. Our potential to reduce waste or abuse natural resources is great. As a result we should be conscious of our options when related to the way in which we use resources.

The following issues areas of concern:

**Resource Concerns:**
- Economic resources - efficiency, productivity, quality
- Environmental resources - minimize waste, use of recycled papers, soy-based inks.
- Natural resources - maximize materials used.
- Human resources - quality, efficiency, most appropriate people to perform tasks.
- Technological resources - apply technology when appropriate.

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This should be rewritten as soon as possible. Need to correlate with prior listing.
After assessing the needs of both the client and the audience it is the **designers responsibility to prioritize those needs** (through goals and objectives) in order to ensure successful communication outcomes. Although the actual process of prioritizing takes place when you develop your goals it is useful to consider the issue at this point. 

You can begin to develop a hierarchy of eventual goals by prioritizing your projects' needs now. If you think of the design process as an exercise in problem solving you will begin to see the successful outcome of your project as the result of a systematic approach to solving the problem. In order to solve the problem you will design a product that meets each need of your communication objectives. Some needs will be critical, others will be superficial relative to a successful creative solution. Naturally you will address the broader, more important issues before those of lesser significance. You can ensure doing so by prioritizing your needs in a hierarchy, from most to least important. In doing so you will have developed a much clearer vision of how you are actually going to go about designing a successful product.
Write a project
Mission Statement

A Mission Statement is a very general, brief statement of intent. It should not exclude any possible outcome of the project, and be in the broadest of terms. Allowing for multiple interpretations is appropriate at this stage of the proposal. Through development of Goals, Objectives, Indicators of Success, and Processes and Strategies the proposal naturally evolves to provide a very concise accounting of all that the project will entail.

Mission Statement

Mission Statement:
*A/The ____________ is a ____________ that will ____________ to this end ____________.

What could be included here as a parallel to "Action Verbs" in Objectives?
Objectives are a function of Goals. A **Goal Statement** describes a desired state, and the supporting **objective** explains specifically what will be necessary for that state to be achieved, and how to know when the Goal has been achieved. Therefore it is necessary to develop Objectives that will accomplish the intent of each Goal.

Think of this metaphorical example:

-- a **Goal** is a house, and the **objectives are the bricks that when assembled form the house**. When designing the house an architect initially renders a schematic of the complete structure without concern for the individual placement of each brick. The blueprint is what you want, or the **Goal**. Once the blueprint, or goal is defined, then the builder begins to decide what is necessary to support the blueprint, and actually produce the plan. The specific actions that will support the Goals of the plan are the **objectives**. Objectives describe the actions and activities that will achieve the Goals. It is necessary to develop supporting objectives for each of the goals to be certain that they become reality.

Goals and Objectives work together. The Goal being the plan, or what you want to achieve, and the Objective detailing how you are going to do it. When developing Goals you should articulate your plans in broad terms. Then when defining relevant Objectives you can and should be very specific about how each of your Goals are going to be satisfied.
"Objectives are useful tools in the creation, implementation, and evaluation of a design. They are useful in pointing to the content and procedures that will lead to successful design, in helping to manage the design process itself, and in helping to prepare the means of finding out whether the design has been successful."

—Robert Keough from Robert Mager

An **Objective** is a description of a performance or action you want the audience to be able to demonstrate before being considered competent. An **objective** describes an intended **result** of a process undertaken.

This category is concerned with the **characteristics** of a usefully stated objective. Its purpose is to help you specify and communicate the **intent** you feel are worth achieving. If this section achieves its objective, you will be able to recognize the characteristics of useful objectives and write effective objectives for your own proposals.

**Specifically,**

Given any objective in a subject area with which you are familiar, in all instances be able to identify (label) correctly the **Performance**, the **Conditions**, and the **Criterion** of acceptable performance when any of all those characteristics are present.
Properly written, explicit objectives are important for a number of reasons. Three of the most significant are listed below:

Second:

The second reason for stating objectives clearly has to do with finding out whether the objective has, in fact, been accomplished. It is impossible to measure the effectiveness of a design product if the products' communicative qualities haven't been clearly defined from the start. Without objectives the designer has no means of determining the successfulness of a finished product.

Third:

A third advantage of clearly defined objectives is that they provide designers (creative teams) with the means to organize their own efforts toward the accomplishment of objectives. With clear objectives in sight designers are better able to make critical decisions about what activities (in particular) will help them satisfy the communication goals of each project.

"A composer can't begin to orchestrate a score before he is aware of the effect he wishes to achieve." — Robert Mager
A useful objective is one that succeeds in communicating the intended result of a design product. It is useful to the extent that it conveys to others a picture of what the designer planned to communicate with a given project, and thus naturally provides a means of measuring a designs' effectiveness in terms of the original communication objectives. In conveying to others the desired outcomes of a piece it is critical that you communicate your intent exactly as you understand it. The writer of behavioral objectives then needs to be concerned with using the proper terminology to ensure his intent is articulated properly. A properly stated objective then is one that communicates your specific intent, and excludes the greatest number of possible meanings other than your intent. Misinterpretation is the greatest single contributing factor to improperly or poorly stated objectives. Consider the differences in specific meaning between 'words open to multiple interpretations', and 'words open to fewer interpretations'.

**Words open to Multiple Interpretations:**
- to know
- to understand
- to really understand
- to appreciate
- to fully recognize
- to grasp the significance of
- to enjoy
- to believe
- to have faith in
- to internalize

**Words open to Fewer Interpretations:**
- to write
- to recite
- to identify
- to sort
- to solve
- to construct
- to build
- to compare
- to contrast
- to smile

The development of a format to use when writing objectives provides for consistency, allows for flexibility, and ensures the objective clearly communicates an intent. The format has three characteristics, and answers three questions:

The characteristics are:
1. **Performance:** An objective always says what the audience is expected to be able to do; the objective sometimes describes the result of the action.
2. **Conditions:** An objective always describes the important conditions (if any) under which the performance is to occur.
3. **Criteria:** Wherever possible, an objective describes
This segment will detail the second of three characteristics necessary in an effective objective, that of conditions.

Often times certain conditions may affect the 'performance' characteristic of an objective. These surrounding conditions may also vary from time to time. Therefore when preparing objectives it is necessary to define explicitly the conditions under which the expected performance is to occur. By doing so we can go one step further to ensuring that our intent is understood.

The key issue here is to describe in the objective the situation, or 'conditions' surrounding the performance.

For instance: When designing a billboard some conditions that are of importance are: speed at which the audience passes the intended message, possible weather conditions, daytime viewing, nighttime viewing, traffic patterns, etc.

In a statement of 'billboard project objectives' it would be necessary then to articulate the performance in terms of the specific conditions present at the time of viewing. A billboard designed to be clearly legible in a blizzard would differ greatly from a sign designed to be legible primarily during sunny daylight hours.

The next question to be addressed: How detailed should you be in your description? Is there a need to document every imaginable situation, how much detail is enough, or necessary? Effective objectives should be detailed enough to be sure the desired performance is recognized by the client, and detailed enough that others understand your intent as you understand it. If it is necessary to provide lengthy documentation, then do so. It is always better to be concise and assume nothing.

CONSIDER THE FOLLOWING EXAMPLES --with the addition of specific conditions

1. After viewing the new corporate logo the audience will be able to write the name of, or describe the 'company colors'.

2. Upon seeing the exhibition poster from a distance of twenty feet, the audience will be able to write the time, date, and place of scheduled opening.

3. After reading the instructional manual once the reader will be able to improve the products performance.

4. Once the audience has seen the billboard they will be able to recall the imagery, and repeat the tagline.

5. After reading the company policy on harassment several times the audience will be able to state two actions that would be considered harassment.

PERFORMANCE / CONDITIONS SUMMARY:

1. An objective describes an intended outcome of a given design piece/project.

2. An objective always states a performance.
This segment will detail the third of three characteristics necessary in an effective objective, that of Criteria.

After having described what you expect your audience to understand, you can increase the communication power of an objective by specifying HOW WELL you would like them understand. This is accomplished by describing the criterion of acceptable performance.

A criterion is the standard by which performance is evaluated, the yardstick by which achievement of the objective is assessed.

It is important to understand that when you specify criteria you need to specify the desired criterion, and not merely a minimum. Criterion can vary greatly from that of barely acceptable to outstanding performance. Therefore it is critical to outline explicitly how well the audience must be able to perform to be considered successful, whether that desired performance is to be a basic understanding of the message, or perfect recollection of the information presented.

The three most common methods of indicating criterion are: speed, accuracy, and quality.

1. SPEED
   The first is speed. One way of describing a criterion of acceptance is to describe a time limit within which a given performance must occur.
   Example: Once the audience has seen the billboard after dark they will be able to recall the imagery, and repeat the tagline UP TO 24 HOURS LATER.

   *Up to 24 hours later* places a time limit criterion on the audience performance.

2. ACCURACY
   The second is accuracy. The audience's understanding and retention of the message or imagery in relation to the actual information is considered the level of accuracy to which the message is understood.
   Example: After reading the company policy on harassment several times (three) the audience will be able to state TWO ACTIONS that would be considered harassment.

   *Two Actions* places an accuracy component on the audience performance.

3. QUALITY

Condition, or Criterion?
Many times is is not easy to read an objective and determine whether a statement is a condition, or criterion. It in not always necessary, or appropriate to be able to do so, the important thing to keep in mind when writing objectives is that a good objective communicates intent specifically, and clearly. If your statement answers the questions below it is probably a very useful objective.
Congratulations, you have written your project "Objectives".

The next step in the project planning process is to write Objectives for your project. In order to do so within this application you should click the "Success Indicators" button below, or refer back to the "MAP" for further assistance.

Keep in mind that the information yet forthcoming in this application may shed new light on your proposal. Feel free to make necessary changes in a previous category by clicking on the topic area below, and then clicking 'edit' from the menu at the lower left. "EDIT" will take you directly to the card on which you entered information pertinent to the given category.
In order to demonstrate how to formulate and utilize effective success indicators, the following examples have been provided. Each of the "Indicators of Success" listed below refer their corresponding numbered "Objective" in the field at the left.

Example Indicators of Success
1. The audience will be able to name the company colors 'midnight blue' and 'canary yellow', or describe them as dark blue and bright yellow.

2. The audience will be able to recall the time of the opening, the location, and the scheduled date.

3. The audience will be able to utilize three of the products' extra benefits. (in the case of a CD player, for example: 1.) program the unit to play six discs consecutively, 2.) program the unit to play songs from several different discs in a specific order, and 3.) program the unit so shut off automatically after at a certain time.

4. The audience will remember the make, color, and model of the car shown on the billboard. The audience will be able to repeat the slogan: "The ultimate driving machine."

5. The audience would be able to describe at least two actions the company considers to be harassment of a discriminatory, or demonstrating nature.
1. After viewing the new corporate logo the audience will be able to write the name of, or describe the 'company colors'.

2. Upon seeing the exhibition poster the audience will be able to write the time, date, and place of scheduled opening.

3. After reading the instructional manual the reader will be able to improve product performance.

4. Once the audience has seen the billboard they will be able to recall the imagery, and repeat the tagline.

5. After reading the company policy on harassment the audience will be able to state two actions that would be considered harassment.

how does this fit with info on prior page? there isn't enough of a difference to include them twice.

these feel cleaner, more specific. can they be combined with previous page?

O.K.R.
The project "Mission Statement" is to be articulated in very general terms. It is to be used as a forum in which to state in the broadest of terms what the project will attempt to accomplish. It is also the appropriate place to list generally all that might be accomplished above and beyond specific objectives.

The ideal "Mission Statement" will address the following issues:

**Who, What, When, Where, Why, and How.**

**Who** is the target audience?
**What** will your project do?
**When** will the project be complete?
**Where** will the project be implemented?
**Why** are you proposing the project?
**How** are you going to accomplish the project?

The following may be useful things to consider before you articulate your "Mission Statement."

**Who** - define any and all possible audiences or any other groups, individuals, or organizations that may have interest or benefit from your work, who will be involved in the project.

**What** - what is your project, what will it do, what won't it do, what do you think it might do, what do you wish it could do, what will the finished outcome be, mass produced, or only one.

**When** - when will the project be complete, when will it be in prototype stage, when would you like it to be complete?

**Where** - where will it be: local, regional, national, global, public or private space, exclusive or general access, in several locations (distribution), or a central location.

**Why** - why are you addressing this issue, what is the problem or situation you feel needs to be altered, what situation are you attempting to improve, why do you think your work is necessary, why is it important to address the issue now.

**How** - how are you going to solve the problem, what techniques, input, sources, technology, funding, etc. will you utilize, how will the finished product look.
As designers we initiate the use of vast amounts of paper and other substances that are products of irreplaceable natural resources. It is important that designers be aware of this fact, and that much of what we will produce eventually will become garbage. Our potential to reduce waste or abuse natural resources is great, as a result we should be conscious of our options when related to the way in which we use resources.

The following issues areas of concern:

**Resource Concerns:**
- **Economic resources** - efficiency, productivity, quality
- **Environmental resources** - minimize waste, use of recycled papers, soy-based inks.
- **Natural resources** - maximize materials used.
- **Human resources** - quality, efficiency, most appropriate people to perform tasks.
- **Technological resources** - apply technology when appropriate.

Issues to be considered in responsible design planning.
Write a project Mission Statement

A Mission Statement is a very general, brief statement of intent. It should not exclude any possible outcome of the project, and be in the broadest of terms. Allowing for multiple interpretations is appropriate at this stage of the proposal. Through development of Goals, Objectives, Indicators of Success, and Processes and Strategies the proposal naturally evolves to a provide a very concise accounting of all that the project will entail.

Mission Statement

Title: [Blank]

Mission Statement: [Blank]

Action: [Blank]

to this end [Blank]
The purpose of specifying design criteria is to assist in the development of relevant project goals. After your brainstorming meeting, you should be able to determine what some project criteria might be. Keep in mind the problem to be solved through your efforts, the constraints already defined, the client's expectations of your performance, as well as anything else relevant to this particular assignment. Using preliminary criteria, you will be able to determine what some project criteria might be. Later, you will be able to determine what some project criteria might be.
When you begin to articulate your project goals it is important to think in terms of a hierarchy. Each of your goals has a relative level of significance in relation to the other goals in your list. You should prioritize your goals in terms of a hierarchy from most to least important. By doing so you will establish a process by which to design. The process should be one of a problem solving nature, and when implemented with a hierarchy list of project “Goals” will render a step-by-step problem solving approach to arriving at a successful and effective solution.

When developing a hierarchy you should list your Goals from the most important first, to the goals least crucial to a successful outcome last. Ask yourself the following questions: “What is the most important thing this project must do?” Place that Goal first. “What else do I want the project to do?” Enter the ensuing Goals next. “What else might the project do (realistically)?” List the following Goals last. You will then have prioritized your “Goals.”

The list of goals will then assist you in focusing your creative efforts on the project within the proper context. It will enable you to solve the problem in a structured, orderly, and appropriate manner, placing importance on the truly critical issues surrounding the project, and placing lesser importance on the relatively more trivial issues. Your goals will also naturally dictate to the time and budget in that you will know at the outset of a project which areas are crucial and will thus require ample time for development to ensure a successful outcome.
Goals and Objectives are closely related, this section will explain the process of developing Goals, and their relationship to objectives.

Goals are broad, whereas Objectives are specific.

By nature a goal is not specific, it is a statement about a state other than the present that is deemed worthy of achieving. It is what you would like to see happen as a result of your efforts. Also, it is the purpose for and motivation behind your project. A goal theoretically represents the reason why you have chosen to work on a given project, that it states what your efforts hope to accomplish, or the situation you hope to affect. Due to all that a "Goal" represents it absolutely must be defined in broad terms.

A "Goal" doesn't necessarily define how results will happen, it just states what will happen. Keep in mind from the outset that a "Goal" needs only to be a statement of the state you hope to achieve. It should be phrased in very general terms, and you should then define how that will happen with an objective.

why is goal sometimes bold, sometimes not? (same w/ objective)

aim for consistency
Specify final design criteria

In the previous section you were asked to develop a list of "Preliminary Design Criteria". The purpose of doing so was to get you thinking about your projects Goals at a very early stage. As you can see your "Preliminary Design Criteria" have been provided for reference below to use when specifying your "Final Design Criteria". Your final criteria will be useful in writing Goals by helping you to specify in terms of goals each of your important design criteria.

Preliminary Design Criteria

Final Design Criteria:
1.0

this may not need to be bold the 2nd & 3rd times

why no underline?
This segment will detail the second of three characteristics necessary in an effective objective, that of conditions.

Often times certain conditions may affect the 'performance' characteristic of an objective. These surrounding conditions may also vary from time to time. Therefore when preparing objectives it is necessary to define explicitly the conditions under which the expected performance is to occur. By doing so we can go one step further to ensuring that our intent is understood.

The key issue here is to describe in the objective the situation, or 'conditions' surrounding the performance.

For instance: When designing a billboard some conditions that are of importance are: speed at which the audience passes the intended message, possible weather conditions, daytime vs. nighttime viewing, traffic patterns, etc.
3. To prepare an objective describing intent:
   A. Write a statement that describes the main performance you expect of the audience.
   B. Rephrase the statement until it answers the question: "What is the audience doing when demonstrating achievement of the objective?"
   C. Describe relevant or important conditions under which the performance is expected to occur. If it seems useful, add a sample test item. Add as much description as is needed to communicate the intent to
What is the main intent of the objective?
What does the audience have to do understand to demonstrate achievement of the objective?
What will they have to do it with/or without?
How will you know when the performance is good enough to be considered acceptable.

**FINAL OBJECTIVES SUMMARY:**

1. An objective is a collection of words, symbols, and or pictures describing one of your important intents.
2. An objective will communicate your intent to the degree you describe what the audience will be doing when demonstrating achievement of the objective, the important CONDITIONS of the doing, and the CRITERION by which achievement will be judged.
3. To prepare a useful objective, continue to modify a draft until these questions are answered:
   - What do I want the audience to be able to do or understand?
   - What are the important conditions or constraints under which I want them to perform?
   - How well must they understand my message for me (client) to be satisfied?
4. Write a separate statement for each important outcome or intent; write as many as you need to communicate your intents.

Subject shifts need to be very clearly indicated (e.g., when we move through with performance conditions moving into criteria).
to alter
to arrange
to bisect
to build
to calculate
to captivate
to carve
to chart
to circle
to cite
to combine
to compare
to compose
to complete
to compute
to construct
to contrast
to conduct
to connect
to create
to deduce
to define
to describe
to design
to develop
to differentiate
to discriminate
to discuss
to dissect
to draw
to duplicate
to elaborate
to evaluate
to experiment
to explain
to express
to extrapolate
to feed
to fill out
to find
to formulate
to gather
to generalize
to identify
to illustrate
to imitate
to improve
to infer
to integrate
to interpret
to investigate
to itemize
to justify
to list
to locate
to measure
to memorize
to name
to organize
to paint
to pantomime
to paraphrase
to perceive
to predict
to prepare
to present
to prove
to recall
to recite
to recognize
to repair
to repeat
to reproduce
to solve
to sort
to speak
to state
to substitute
to suggest
to synthesize
to translate
to verbalize
to underline
to write
## Write Project Objectives

The keyword listing at the right is provided to enable you to be as specific as possible in determining objectives. Write your Objectives in the bottom field while referring to your Goals above. Be certain to articulate enough objectives to ensure all "goals" are satisfied.

### GOALS

**3.0 Hypothetical goal number one:** To provide public transportation to all those needing the service within a ten mile radius of RIT.

### OBJECTIVES:

**1.0**

<table>
<thead>
<tr>
<th>MAP</th>
<th>Mission</th>
<th>Goals</th>
<th>Objectives</th>
<th>Success Indicators</th>
<th>Processes &amp; Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUIT</td>
<td>→</td>
<td>←</td>
<td>REVIEW</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Example Mission Statement

**APPLYING:**
In the context of the profession of graphic design, there is currently no tool available that will enable designers to help define a problem and outline a process that will produce an effective solution for the problem. Through the production of 'Design Planner®' I will improve the quality of graphic communications by providing users with an interactive tool that will clarify the creative process and ensure the communication 'objectives' of each problem are achieved.

**METAPHORICAL:**
A Mission Statement is a dream home, a thought of perfection. A product unbounded by limitations of any kind, a vision brought to reality. It is a statement describing everything included in the ultimate solution without regard for that which might not be possible.
Example Goal

APPLICATION:
Design Planner will:
1. Provide the user with a friendly and highly interactive interface.
2. Have an accompanying user manual.
3. Provide a project proposal template structure that can be applied to any project, and help users to develop a creative project planning and management tool.
4. Allow for flexibility.
5. Help users to develop and achieve communication objectives.
6. Help users to define explicitly what will be achieved through the production of a given piece.
7. Utilize an appropriate visual metaphor.
8. Allow for a broad to narrow operational process.
9. Ensure users have considered appropriate cultural, societal, technological, environmental, and economic issues that may influence their work.
10. Define objectives in behavioral terms.
11. Assist users in developing both Formative and Summative objectives.

METAPHORICAL:

Table:
<table>
<thead>
<tr>
<th>Mission</th>
<th>Goals</th>
<th>Objectives</th>
<th>Success Indicators</th>
<th>Processes &amp; Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Map</td>
<td></td>
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</tr>
<tr>
<td>Quit</td>
<td>Return</td>
<td>Print</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Example Timeline**

**Timelines** are very project-specific, and can vary greatly between tasks. A timeline can range from an hour by hour accounting of activities, to merely a project start and completion date. The key is that you develop a functional timeline for your project.

MacProject software may be of assistance.

---

**APPLICATION:** Note, this is an abbreviated timeline, I utilized (and would recommend) MacProject software in the development of my thesis project timeline.

**Design Planner® Timeline**

Project start: 9/1/91
Project complete: 5/15/92


---

<table>
<thead>
<tr>
<th>Mission</th>
<th>Goals</th>
<th>Objectives</th>
<th>Success Indicators</th>
<th>Processes &amp; Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
Example Success Indicators

APPLICATION:
Design Planner® Indicators of Success:
1. Are users consistently able to write, save, and later revise project proposals that include: Mission statement, Goals, Objectives, Success Indicators, and Processes & Strategies of Implementation?
2. Are projects completed with the aid of Design Planner® successful in achieving appropriate communication objectives?
3. Is the interface being used frequently, and thought of as an asset?
4. Is the interface flexible enough to expand its use into project planning and management activities in fields other than graphic design?
5. Was the MFA conferred?

METAPHORICAL:
After dreaming about the house, planning it, and building it, ... What are some "Indicators of Success"?
Consider the following (Indicators):
Do you like it?
Will you ever move, or build a new home again?
Does your family/spouse like it?
The Design Planner® Process

The first step is to address the project "Mission Statement."

The mission statement is a lofty description of the project.

Goals, objectives, and processes and strategies of implementation will then ensure the initial "mission" is achieved.

After stating the "mission" you will move on to articulate "Goals" that will support it.

Goals literally "support the mission" by directing it into its many parts, seeing each component as a goal to be achieved.

A problem solving approach is then adopted by regarding each of the goals as a small problem to be solved in the process of satisfying the "Mission."

"Processes and Strategies of Implementation" support the entire process, from mission to mission through objectives.

The "Process and Strategy" is where you should describe exactly how you plan on going about meeting the objectives that support each goal, that in turn ensure the project is successful in satisfying the original mission.
The Design Planner's Process

Design Planning is a dynamic process.
The planning begins with a Mission, followed by Goals to reach the Mission. Objectives to satisfy each particular Goal, and the Process and Strategy of Implementation to achieve each of the aforementioned activities.

The plan becomes dynamic during the design process as the completion of each step begins to support the one above it.

...which in turn achieve the original Mission.
The planning begins with the Mission and is followed by the processes of defining how the mission will be achieved.
The implementation begins with the Process, or the action of completing the plan. The process begins with the Mission, or development of the plan.

The Process and Strategy of Implementation achieves the Objectives.
The Objectives achieve the Goals...
The dynamic process continues, making appropriate changes when necessary until the project is deemed successful in terms of the original communication objectives.

Another way of visualizing the process is to think of the project as an architectural structure. Its outer edges represent the complete form.

Upon closer inspection we can see that the whole is a product of its many integral parts, each dependent on the others. Design Planning uses the brick as a metaphor to illustrate this relationship.
The Design Planner Process

Each brick represents a different part of the process, or a separate phase of development.

Map | ← | →
---|---|---
Quit | Return

The Design Planner Process

...each contributing to the whole.

Map | ← | →
---|---|---
Quit | Return

The Design Planner Process

Here again we see how each step in the process supports the others...

Map | ← | →
---|---|---
Quit | Return

The Design Planner Process

Processes and Strategies of Implementation
Determine priorities

You can begin to develop a hierarchy of eventual goals by prioritizing your project’s needs now.

If you think of the design process as an exercise in problem solving you will begin to see that the successful outcome of your project is the result of a systematic approach.

In order to solve the problem you will design a product that meets each specific need of your communication objectives. Some needs will be critical, others will be less important relative to a successful creative solution. Naturally you will address the broader, more important issues before those of lesser significance.

You can better address objectives in the proper hierarchical sequence by prioritizing your needs from most to least important. If doing so you will have developed a step by step creative problem solving process to use in pursuit of the ideal solution to your problem.

Specify Preliminary Design Criteria

The purpose of specifying “design criteria” is to assist in the development of relevant project goals. After your client meeting you should be able to determine what some project criteria may be. Keep in mind the problem to be solved through your efforts, the constraints already defined, the client’s expectations of your performance, as well as anything else relevant to the particular assignment. Listing “Final Design Criteria” will be an important step toward writing goals.

Preliminary Design Criteria

Hello, this is working, oh boy.

blah blah blah, this is meaningless drivel

Worthless in meaning, but it is type

Move on to Goals

Congratulations, you have written your project "Mission Statement".

The next step in the project planning process is to determine relevant project goals. In order to do so within this application you should click the "GOALS" button below, or refer back to the "MAP" for further assistance.

Keep in mind the information yet forthcoming in this application may shed new light on your proposal. Feel free to make necessary changes in a previous category by clicking on the topic area below, and then clicking "edit" from the menu at the lower left. "EDIT" will take you directly to the card on which you entered information pertinent to the given category.
Indicators of Success

"Indicators of Success" are an integral part of any planning and management process. Their purpose is to articulate goals and an expectation of the accomplishment of the objectives (Performance Evaluation). They can also be used to evaluate and monitor progress during the design process (Formative Evaluation).

"Indicators of Success" work with "Goals" and "Objectives", they are a format in which to define factors that will be used to evaluate and measure progress against. They provide the user with a self-correcting mechanism that will ensure maximum effectiveness in both process and product.

Evaluation Issues

1. Are the Goals and Objectives of the project being achieved?
2. Are the activities being conducted as planned?
3. Are resources being properly allocated?
4. Are activities being carried out on time?
5. Are any areas becoming problems which might need to be modified or adjusted?
6. Are the projects' intended outcomes being achieved?
7. Is the project successfully achieving its objectives and overall goals?

Indicators of Success and Objectives

The measure of achievement must be related to a starting point. In this case your project "Objectives". It is not enough to simply state an objective, the objective must be seen in context with the existing pre-condition in order for its true effectiveness to be measured.

Indicators of Success are to clarify Objectives as:

Objectives clarify Goals.

Specify "Indicators of Success" for each project objective to be thorough.

Objectives

1. After viewing the new corporate logos the audience will be able to draw the name of, or describe the "company color".
2. Upon seeing the exhibition poster the audience will be able to draw the name of, or describe the "company color".
3. After viewing the promotional materials the audience will be able to draw the name of, or describe the "company color".
4. After viewing the promotional materials the audience will be able to draw the name of, or describe the "company color".
5. The audience will be able to utilize the benefits of the product in the field.

Indicators of Success

1. The audience will be able to view the long-sleeved "electric blue" and "electric blue", or describe them as "electric blue".
2. At least 25 people attend the exhibition.
3. The audience will be able to utilize some of the products in the field.
4. The audience will be able to utilize some of the products extra benefits. The product will be used more than a result.

Using Indicators of success

In order to demonstrate how to formulate and utilize effective "Indicators of Success" the following examples have been provided. Each of the success indicators listed below refer their corresponding numbered objective in the field at the left.
Processes and Strategies of Implementation

The purpose of clearly defining a "Process & Strategy of Implementation" by which to solve a problem is important for a number of reasons:

1. It will help the creative team develop and use a problem-solving approach to satisfying a client's needs.
2. It will provide a formal list of the planned tasks that will be undertaken in the process of reaching the optimal solution (this will help in time management and documentation of milestones relative to In-house cost).
3. It will provide a timeline of activities that can be reviewed with the client and creative staff to ensure everyone's goals have been realized carefully. (This required an entire day of brainstorming common solutions)
4. It provides formal documentation of the design process undertaken to reach the given solution in both narrative and summative terms.

Develop a Timeline

A Timeline is an essential part of any planning document. It states when the project will be finished, as well as determines benchmark dates during the development of the project.

Timeline can be thought of on the micro or macro level, and will inversely change from project to project. They often need to be modified during the development of a project. It is important to have a beginning timeline however so that the time constraint inherent in every project is addressed at the beginning. The timeline will assist in allocating time to tasks necessary in the design process. It will also further illustrate the relative significance of certain tasks to others.

--Keep in mind the listing at left of possible deadlines may need to schedule and meet. The list is not by any means conclusive, portions of it may not be of importance, and it also may omit issues of relevance to your project.

Processes and Strategies of Implementation

Implementation is the step in the problem-solving process where an idea is chosen, and brought to fruition. In order to do so a "Process & Strategy of Implementation" is necessary. It will state how you are planning on going about satisfying the objectives set forth earlier. It is the active state of solving the problem. It is the time to put the plan into action.

"Now that you have planned your work, it's time to work your plan!"

In order to better understand what this means to you and your task consider the analogies listed at left.

The key to developing a successful "Process and Strategy of Implementation" is to state explicitly how you plan to achieve the results set forth in your "Goal" and "Objective" statements.
Appendix 8

Design Planner® Application
Appendix 8.1

Introduction
Navigator Map
Creative Planning Process Diagram
Design Planner Process Diagram
Introduction

This application will help you to formulate and articulate your design process in a problem-solving approach through a series of steps. After using the Design Planner, you can expect to have written a project proposal that will include: a project Mission Statement, Goals, Objectives, Indicators of Success, and Processes and Strategies of Implementation. After completing the introduction segment, you will arrive at a map illustrating how each of the many components in this application are related. The "Map" will function as the main navigational tool. At any time you may refer back to it and select your own path through the information by clicking on any button. First time users of the application should take the time to read the information in each area, and begin at the "Mission Statement." Upon completion of your proposal, you may save it for later reference, and print a copy for your own personal use, or for a client.

The Creative Planning Process

The diagram you will see next is a visual interpretation of the Creative Planning Process and is designed to demonstrate the different components of a successful project management plan. An animated sequence has been included to demonstrate the dynamic process involved in planning and managing a project, and also to demonstrate how the Creative Planning Process Diagram addresses the six critical questions a sound project planning and management proposal should address: Who, What, When, Where, Why, and How. Design Planner® should be seen in context with the total process. It is the product of a synthesis of the many different activities conducted within each phase of the Creative Planning Process.
Design Planner

The Creative Planning Process

- Manage
- Assess Needs
- Design
- Evaluate and make decisions
- Develop / Apply rationale and standards
- What is the project?
- Why is it important?
- Conduct project
- Produce and disseminate
- Implement the planned design process

How, When, & Where...
will the project be implemented?
The Creative Planning Process

Manage
Design and plan evaluation strategies
Assess Needs
Design
Evaluate and make decisions
Develop / Apply rationale and standards

Conduct project
Produce and disseminate
Implement the planned design process

Design Planner

The Creative Planning Process

Manage
Design and plan evaluation strategies
Assess Needs
Design
Evaluate and make decisions
Develop / Apply rationale and standards

Conduct project
Produce and disseminate
Implement the planned design process

Design Planner

The Design Planner Process
The Design Planner® Process

The illustration at right represents the organizational hierarchy utilized by Design Planner®.

The process begins with the development of the "Mission Statement." Then the "Goals" are written to support the mission. The next step is to write "Objectives" that support the goals, and lastly "Processes and Strategies of Implementation" are developed to support the objectives.

After stating the "mission" you will move on to articulate "Goals" that will support it.

Goals literally "support the mission" by dissecting it into its many parts, stating each component as a goal to be achieved.

A problem-solving approach is then adopted by regarding each of the goals as a small problem to be solved in the process of satisfying the "Mission."
Design Planner

The Design Planner Process

"Processes and Strategies of Implementation" support the entire process, from mission to objectives.

The "Process and Strategy" is where you should describe exactly how you plan on going about meeting the objectives that support each goal, that in turn ensure the project is successful in satisfying the original mission.

Map ← → Quit Return

Design Planner

The Design Planner Process

Design Planning is a dynamic process.

The planning begins with a Mission, followed by Objectives to reach the mission, Goals to achieve each of the Objectives, and lastly a Process and Strategy of implementation to achieve each of the aforementioned activities.

The plan becomes dynamic during the design process as the completion of each step begins to support the ones above it.

Map ← → Quit Return

Design Planner

The Design Planner Process

The Process and Strategy of Implementation achieves the Objectives, achieving the Goals...

Map ← → Quit Return

Design Planner

The Design Planner Process

...which in turn achieve the original Mission.

The planning begins with the Mission and is followed by the process of defining how the mission will be achieved.

The implementation begins with the Process, or the action of completing the plan. The process begins with the Mission, or development of the plan.

Map ← → Quit Return
The navigator map allows you to access information within the stack interactively. By clicking on any rectangle or button you can go directly to that card within the stack. The illustration represents each of the components within this application. The areas you have covered already have been tinted. As a first time user you should click on the "Mission Statement" button in order to begin.

The navigator is provided to give you greater control over information by allowing you to choose your own path throughout the application, accessing all or only parts of the text.

Bibliography


Credits

Design Planner was developed as a MFA Thesis project at Rochester Institute of Technology during the 1991-1992 academic year by Roy Procheske Jr. The project fulfilled the Thesis requirement in the Graphic Design department within the College of Fine and Applied Arts. Any reproduction in whole or in part of Design Planner without the expressed written consent of R. Procheske Jr. is prohibited.

For all of their help, advice, and support, Special thanks to:

Mr. & Mrs. Bette & Eric Procheske Sr.
Mr. Joseph Procheske, posthumously
Mr. Lither Jorga
Mr. R. Roger Remington
Ms. Deborah Beadle
Mr. Mark Collins
Dr. Chuck Plummer
Mrs. Betty Adby
Mr. Jorge Fresco
Mr. Robert Kough
Dr. Joanne Szafrin
Mr. James VanHagen
Kappa Eigma Fraternity
Appendix 8.2

Mission Statement
Design Planner

Determine priorities

You can begin to develop a hierarchy of eventual goals by prioritizing your project's needs now.

If you think of the design process as an exercise in problem solving, you will begin to see that the successful outcome of your project is the result of a systematic approach.

In order to solve the problem you will design a product that meets each specific need of your communication objectives. Some needs will be critical, others will be less important relative to a successful creative solution. Naturally you will address the broader, more important issues before those of lesser significance.

You can be certain to address objectives in the proper hierarchical sequence by prioritizing your needs from most to least important. In doing so you will have developed a step by step creative problem solving process to use in pursuit of the ideal solution to your problem.

Specify Preliminary Design Criteria

The purpose of specifying "design criteria" is to assist in the development of relevant project goals. After your initial client meeting you should be able to determine what some project criteria may be. Keep in mind the problem to be solved through your efforts, the constraints already defined, the client's expectations of your performance, as well as anything else relevant to this particular assignment.

Preliminary Design Criteria

Write a project Mission Statement

A Mission Statement is a very general, broad statement of intent. It should not exclude any possible outcome of the project, and be in the broadest of terms. Allowing for multiple interpretations is appropriate at this stage of the proposal. By filling in the blanks of the following statement you will develop an effective Mission:

"A Thеса___________________________
that will__________________________
tоt his end_________________________"
Example Mission Statement

APPLICATION:
There is currently no tool available that will enable designers to help define a problem and then outline a process that will produce an effective solution for the problem. 'Design PlannerG' will assist in improving the quality of graphic communications by providing users with an interactive tool that will identify the creative process and ensure the identified communication 'objectives' are achieved.

METAPHORICAL:
A Mission Statement is a dream home, a thought of perfection. A product unbounded by limitations of any kind, a vision brought to reality. It is a statement describing everything included in the ultimate solution without regard for that which might not be possible.
Appendix 8.3

Goals
**Goals**

Goals and objectives are closely related, this section will explain the process of developing Goals, and their relationship to objectives.

**Goals are lofty, so objectives are specific.**

By nature a goal is broad, it is a statement about a condition other than the present that is deemed worthy of achieving. It is what you would like to see happen as a result of your efforts. Again, it is the purpose for and motivation behind your project. A goal theoretically represents the reason why you have chosen to work on a given project. It states what your efforts hope to accomplish, or the situation you hope to affect. Due to all that a goal represents it absolutely must be defined in broad terms.

**The Utopian vision**

One of the many things that a hierarchy of Goals can allow for is a Utopian Vision. The “Utopia” being the ultimate solution, the answer to the problem without the burden of constraints.

The dictionary defines a “utopia” as:

“an impractically idealistic goal or scheme”

Furthermore it helps to motivate designers in that it presents an almost impossible state of achievement to aim for, in the process of designing it also helps to further clarify what a satisfactory level of achievement will be within the project Goals. This translates into several levels of goals:

- those that are essential,
- those that are perhaps possible,
- and those that would provide for the “utopian” solution.

**The importance of a hierarchy of goals**

As you begin to articulate your project “Goals” it is important to prioritize. Each of your goals has a relative level of significance in relation to the other goals in your list. You should prioritize your goals from the most to the least important. By doing so you will establish a process to which to design. The project should be one of a problem solving nature, and when implemented with a prioritized list of project “Goals” will render a step by step solution solving approach to a successful and effective solution.

The list of goals will assist you in focusing your creative efforts on the project within the proper context. It will enable you to solve the problem in a structured, orderly, and appropriate manner, placing the most importance on the truly critical issues surrounding the project. Your goals will also naturally correspond to the times and budget available. Through this approach you will know at the outset of a project which areas are crucial and will then resolve relatively more time for development to ensure a successful outcome.

**Goals in relation to Objectives**

Objectives are a function of Goals. A Goal Statement describes a desired state, and the associated Objective explains specifically what activities will be necessary to achieve the desired state. Therefore it is necessary to develop Objectives that will accomplish the intent of each Goal.

In summary Goals and Objectives work together. The goal being the plan, or what you want to achieve, and the objective detailing how you are going to go about it. When developing your goals you should articulate your hopes in “lofty” or very broad terms. Then when defining specific Objectives you can develop a very specific idea of how each of your Goals is going to be satisfied.
How to develop Goals

In order to articulate goals you must give thought to what it is that you hope to accomplish with your project. To do so you should consider the issues you thought of when you specified your "Preliminary Design Criteria" in the previous section. With the help of that list (and the opportunity to update it shortly) you will have the proper input to begin writing your goals.

The actual development of goals is a process in which you articulate that which you are hoping to accomplish through the completion of a given project. It is important to be thorough and provide full documentation of all that you are planning on accomplishing. It is also important to be certain that what you specify as a "Goal" is possible to accomplish given the project constraints. Do not list everything you imagined in your "Planning" as a true goal.

Keep in mind that you had better be sure you live up to your own expectations (in terms of goals) when the project accomplishments are evaluated.

The following five step process will serve as a transition to writing objectives, and also assist you in writing and analyzing goals.

1.0 Write down a goal, in whatever abstract terms best express your intent. Be certain to word the statement in terms of outcomes rather than processes. Doing so will help you to avoid making the mistake of describing how you are going to

Write project Goals

Goals should be written in relation to the Mission Statement in order to be certain that the goals do in fact achieve the mission. Write one or more goals for each section in your mission, also consider your final design criteria.

Mission Statement

Goals

Move on to Objectives

Congratulations, you have written your project "Goals".

The next step in the project planning process is to write Objectives for your project. In order to do so within this application you should click the "Objectives" button below, or refer back to the "MAP" for further assistance.

Keep in mind that the information yet forthcoming in this application may shed new light on your proposal. Feel free to make necessary changes in a previous category by clicking on the topic area below, and then clicking 'edit' from the menu at the lower left. "EDIT" will take you directly to the card on which you entered information pertinent to the given category.
## Example Goal

### APPLICATION:

- **Design Planner** will:
  1. Provide the user with a friendly and highly interactive interface.
  2. Have an accompanying user manual.
  3. Provide a project proposal template structure that can be applied to any project, and help users to develop a creative project planning and management tool.
  4. Allow for flexibility.
  5. Help users to develop and achieve communication objectives.
  6. Help users to define explicitly what will be achieved through the production of a given piece.
  7. Utilize an appropriate visual metaphor.
  8. Allow for a broad to narrow operational process.
  9. Ensure users have considered appropriate cultural, social, technological, environmental, and economic issues that may influence their work.
  10. Define objectives in behavioral terms.
  11. Assist users in developing both Formative and Summative objectives.

### METAPHORICAL:

- Mission
- Goals
- Objectives
- Success Indicators
- Processes & Strategies
Appendix 8.4

Objectives
Objectives

An Objective is a description of a performance or action you want the audience to be able to demonstrate before being considered competent. An objective describes an intended result of a process undertaken.

This category is concerned with the characteristics of a property stated objective. Its purpose is to help you understand those characteristics, and be able to apply them to your own work. A properly articulated "Objective" is comprised of three components:

Specifically:

1) Performance: An objective always states what the audience is expected to be able to do; the objective sometimes describes the result of the action.

2) Conditions: An objective always describes the important conditions (if any) under which the performance is to occur.

3) Criteria: Whenever possible, an objective describes the criterion of acceptable performance by describing how well the audience must perform in order to be considered acceptable.

The purpose and benefits of properly written objectives

Proprietary, explicit objectives are important for a number of reasons. Three of the most significant are listed below.

First: When clearly defined objectives are lacking, there is no sound basis for the selection of media, tools, methods, or message content. If you don't know where you're going, it is difficult to select the most appropriate means for getting there. Objectives enable the designer to see all of the necessary components of a given project in context with its constraints.

Second: The reason for stating objectives clearly has to do with finding out whether the objective has, in fact, been accomplished. It is impossible to measure the effectiveness of a design product if the works' communication objectives have not been clearly defined.

Third: A third advantage of clearly defined objectives is that they provide designers (creative teams) with a means to organize their own efforts toward the accomplishment of objectives. With clear objectives, designers become better able to make critical decisions about what activities (in particular) will help them satisfy the communication goals of each project.

Qualities of useful objectives

A useful "Objective" is one that succeeds in communicating the intended result of a design product. It is useful to the extent that it conveys to others a picture of what the designer intends to communicate through a given project, and naturally defines levels of achievement by which success can be measured.

In conveying to others the desired outcome of a project it is crucial that you communicate your intent clearly as you understand it. The writer of behavioral objectives then needs to be concerned with using the proper nomenclature to ensure his intent is articulated properly. Therefore a properly stated "Objective" is one that communicates your specific intent, and excludes any factors that might be misleading. Misinterpretation is the greatest single contributing factor to improperly poorly stated objectives. Consider the differences in specific meaning between 'words open to multiple interpretations,' and 'words open to fewer interpretations.'
Move on to Indicators of Success

Congratulations, you have written your project "Objectives".

The next step in the project planning process is to write Objectives for your project. In order to do so within this application you should click the "Success Indicators" button below, or refer back to the "Map" for further assistance.

Keep in mind that the information you need to fill out is from the keyword "Project Proposal". Feel free to make necessary changes in a previous category by clicking on the topic below, and then editing "Edit" from the menu at the lower left. "Edit" will take you directly to the card on which you entered information pertinent to the given category.

Example Objective

APPLICATION:
Design Planner: Objectives
1. Will allow you to write a Project Proposal that will include: a Mission Statement, Goals, Objectives, Success Indicators, and Processes. Strategies of implementation.
2. Will allow you to print a copy of the completed proposal.
3. Will allow you to save the proposal for later use, and revision.
4. Will allow you to evaluate a project's effectiveness in terms of the original communication objective.

METAPHORICAL: Once the blueprint, or goal is defined, the project begins to decide what is necessary to support the project, and actually produce the plan. The specific actions that will support the goals of the plan are the Objectives.

Objectives Summary

SUMMARY: 1. An objective is a collection of words, symbols, and pictures describing one of your important intentions.
2. An objective will communicate your intent by being specific about what the audience will be doing when demonstrating achievement of the objective, the important CONDITIONS regarding the action, and the CRITERION by which achievement will be judged.
3. To prepare a useful objective, continue to modify a draft until these questions are answered:
   - What do I want the audience to be able to do or understand?
   - What are the important conditions or constraints under which I want them to perform?
   - How will they understand the message for me (client) to be satisfied?
4. Write a separate statement for each important outcome or intent; write as many as you need to communicate your intents.

Design Planner
Appendix 8.5

Indicators of Success
Using Indicators of Success

The first step in the process of design is to identify the main goals of the project. This includes understanding the needs of the clients, the constraints of the budget, and the goals of the project. Once these goals are identified, the next step is to develop a plan for achieving them. This plan should include a timeline, a budget, and a set of tasks that need to be completed.

The plan should be reviewed and approved by all stakeholders. It should also be flexible enough to accommodate changes as they arise. The process of design is ongoing, and the plan should be reviewed and updated regularly.

Once the plan is in place, the design team can begin work on the project. This may include creating sketches, drafting plans, or conducting research.

It is important to remember that the design process is iterative. Changes may be necessary as new information is discovered or as the project progresses. The design team should be prepared to adapt their plan as needed.

Once the design is complete, it should be evaluated to ensure that it meets the goals of the project. This evaluation should be based on a set of indicators of success, which have been identified in advance.

Indicators of Success

- Functionality
- Aesthetics
- Cost
- Schedule
- Durability
- Sustainability

The evaluation should be conducted by the project team and should be documented in a report. The results of the evaluation should be used to improve future projects.

Indicators of Success are an integral part of the design process and should be considered at all stages of the project.
Appendix 8.6

Processes and Strategies of Implementation

General Process
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Appendix 8.7

Print Proposal
Appendix 9

Exhibition
Design Planner

"If graphic designers wish to be recognized as problem solvers, it is indispensable that they concern themselves with the results of their work measured by achievement of the objectives that generated the need for the production of the visual communication in question."

Jorge Frascara, University of Edmonton, Alberta CA

Where will new media be used?
"New media will find a number of applications. Markets for electronic information services, interactive training materials, and online software documentation are established. Other areas of application will involve business, reference education, marketing, and entertainment."

Les Almendinger, Institute of Design, Illinois Institute of Technology

Problem Statement:
In the context of the profession of graphic design there is currently no tool available that will enable a designer to clarify and define a problem, and articulate a process that will render an effective solution to the problem.

Design Planner® is an interactive planning guide for the process of design, created with Hypercard 2.0 software from Apple®. The application helps users articulate their design process in a project proposal format, and adopt a problem solving approach to the creative process. By following the process outlined in the application the user can develop a project proposal for any given task. The prototype contains a project mission statement, goals, objectives, indicators of success, and processes and strategies.
The Creative Planning Process

The diagram below represents the greater context of project planning and management activities. Design Planner® is a product of the synthesis of many activities conducted within each of the four project management phases noted in the diagram.

The Navigator Map will allow users to dictate their own non-linear path through the application. By using the mouse and 'clicking' on any rectangle, the user can move directly to any specific area within the prototype.

The images below are prints of actual screens from the prototype. Represented are the cards on which the user is expected to enter information about their own project specific, Goals, Objectives, and Success Indicators.
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Design

Planner

Introduction

Philosophy
blah blah blah, greeking to show
placement of text within the layout
format as proposed, meaningless dribble
ontent wise but does serve a purpose.

Need
for what, a design planner? lah blah
blah, greeking to show
placement of text within the layout
format as proposed, meaningless dribble
ontent wise but does serve a purpose.
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element cards

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Purpose and Benefits

for what, a design planner? lah blah
blah, greeking to show placement of text within the layout format as proposed, meaningless dribble
ontent wise but does serve a purpose.

for what, a design planner? lah blah
blah, greeking to show placement of text within the layout format as proposed, meaningless dribble
or what, a design planner? lah blah
blah, greeking to show placement of text within the layout format as proposed, meaningless dribble

Context

for what, a design planner? lah blah
blah, greeking to show placement of text within the layout format as proposed, meaningless dribble
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   - release rights (copyright)

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4. Design Planner© application

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   documentation of need
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   context (total systems plan diagram).

Level two: Design Planner application in print, with supplementary information, and instruction.

Introduction to Design Planner functionality
- buttons
- fields
- saving
- printing
- notes
- examples

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   - documentation of need
   - background
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   - context (total systems plan diagram)
   - parallel applications

Level two: Design Planner application in print, with supplementary information, and instruction.

Introduction to Design Planner functionality
   - buttons
   - fields
   - saving
   - printing
   - notes
   - examples

1. Mission Statement
2. Goals
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Descriptive Text
Narrative Titles
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Prior to the development of this application there was no tool designers could utilize to assist in the design process, and ensure clearly defined objectives were successfully achieved within each
Design Planner

assignment. Without considering the original communication objectives of a project it is impossible to measure the outcomes' true success, thus the creative effort is devalued, and perhaps not appropriate. Design Planner® will go a long way toward making sure the creative effort is focused on the correct target, and that the product does in fact achieve critical communication objectives.

The ultimate purpose of Design Planner® is to improve the quality of graphic communications. It does so by providing users with a format in which they are continuously reminded of critical design planning and management issues, as well as their own projects' objectives.

The application itself is part of a much broader context, that of project planning, management, and evaluation activities.

The diagram at left illustrates the Total Systems Plan of which design planner is a product. Design Planner® is the result of a synthesis of the most appropriate processes in the Total plan and other sources.
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Hypercard Basics

The Hypercard® interface developed by Apple Computer Inc. utilizes a metaphorical approach to the organization and transformation of information. The metaphor is a note 'card', and each completed project is termed a 'stack' referring to a pile of note cards.

Hypercard development is a tool for designers of interactive interfaces, as well as a tool for everyday system improvements, scheduling, etc. Hypercard allows the user to control the way in which information is accessed. The concept of user driven information is called interactivity, the user is physically interacting with the information by clicking on buttons that control navigation. By using the mouse to point and click on buttons appearing on the screen the user can control movement throughout any Hypercard application. Buttons may be indicated by a border outline of many different sizes and shapes, can be named with text, and can also carry an easily identifiable icon, such as a forward arrow meaning 'go to the next card in the stack'.

Hypercard provides textual information in what are called fields. Fields exist on cards and contain relevant verbal information. When you are asked "Print a field?" for example Hypercard is actually asking you to choose one of many fields that you would like to have a printout of.

As mentioned earlier Hypercard projects are called 'stacks'. A stack can function by itself, moving only to cards in itself, or may also work with separate stacks, and their respective cards. Many applications developed in Hypercard are actually multiple 'stacks' working together when necessary. This is the case with Design Planner® as well. The application consists of eight unique stacks that work together based on user input. When starting the application the user should double-click the mouse on the 'dpintro' stack.

Within every interactive interface the need arises to provide a visual context detailing all of the information within an application. Due to the 'interactive' nature of Hypercard applications users will move freely through the information, accessing what is most important at a given time. However at another time the user may wish to tap into a different part of an application's functionality, thus the need to provide a layout of the application and all its components. This is done in the form of an informational chart designed to illustrate each area in the application, and its relation to the whole. This need is satisfied by the "Map" in the Design Planner® Application.
Design Planner
Context

the process of writing a mission, goals, etc. Secondly it is a production tool for the more experienced proposal developer. By using the interface the user can be continually reminded of key factors relating to the assignment at hand as well as produce the proposal in the same application, thus eliminating the need for timely research. By providing a user friendly and highly informative interface Design Planner® will help to improve the quality of visual communications by streamlining an often neglected exercise in the creative process, that of planning and goal setting. If a designer is without a clear vision of what is to be accomplished by a given product at the projects inception it is almost certain the outcome will not be as effective as it could/should be. The application solve the problem of designers designing for designers, and help focus the creative effort on the true communication objectives of the client.

Parallel applications presently exist commercially that enable the user to develop a business plan, brainstorm creative concepts, and schedule a project. In order BizPlanbuilder, IdeaFisher, and MacProject, provide a context in which Design Planner® will exist, that of interactive project planning supplements.
Design Planner
Context

Design Planner exists in the context of other interactive applications designed to assist users within a given area of specialty. Similar commercial applications include; Biz Plan Builder, Idea Fisher, and MacProject. Design Planner was developed to assist users in developing and articulating an effective creative process. After using the application designers will have written a project proposal that can be used in client interaction, and as a personal creative problem solving tool. The completed proposal will include: Mission Statement, Goals, Objectives, Indicators of Success, and Processes and Strategies of Implementation.

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The ultimate purpose of Design Planner® is to improve the quality of graphic communications. It does so by providing users with a format in which they are continuously reminded of critical design planning and management issues, as well as their own projects’ objectives. The application itself is part of a much broader context, that of project planning, management, and evaluation activities. The diagram at left illustrates the a total systems plan adapted to The Creative Process, of which design planner is a product. Design Planner® is the result of a synthesis of the most appropriate processes in the total plan applied to the creative process.

Design Planner® is a powerful tool that has the power to function on two levels. It first functions as a teaching device by providing instruction about
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Introduction to
Design Planner

On certain cards the buttons in the main navigational area will vary from the standard five listed above. An introduction to buttons you will see from time to time is included below.

*EDIT*
will take you directly to the card where you enter text (within each area) ex: click "edit" when in the "Objectives" stack to go to the "Write Objectives" card. This button is most useful when re-entering the application to make changes to your proposal.

*EXAMPLE*
will allow you to see an example of the subject currently being addressed. ie: clicking on 'example' while working in 'Goals' will show you an example goal.

*PRINT*
the print button will bring you to the print stack, allowing you to title your proposal and print a copy of your document, or save a copy of your proposal as a Hypercard stack or as a word processing document for later use.

*PRINT NOTES/FIELD*
will allow you to print a copy of the card you are currently on, (or in cases of long fields unable to be seen on the screen 'print field' will produce for you a copy of the text in its entirety) Use this function to print certain cards you may wish to have with you away from the computer interface to use as worksheets when developing your proposal.

*SAVE A COPY*
allows you to save a copy of your proposal as a Hypercard stack, or as a word processing document without quitting afterward.

Upon entering the main portion of the application you will notice a new group of buttons appear directly under this field. The new buttons will allow you to move freely between the different components within the application. After having reviewed the information key to each component of a successful project proposal you will be asked to enter text relevant to the particular area in which you are working. Design Planner will format your text into a proposal format you may then print out. The cards on which you will need to be 'active', or enter text will be highlighted accordingly.

The area to the left of the vertical rule next to this field has been reserved as an area designated to provide helpful hints, reminders, reviews, or summaries of key material.
Mission Statement

The first step in the proposal development process is to develop a Mission Statement for the project. The ideal project mission statement will address the following issues: Who, What, Where, When, How, and Why. Who is the target audience, What will your project do, When will the project be complete, Where will the project be implemented, Why are you proposing the project, How are you going to accomplish the projects' goals and objectives?

The application will assist you in completing this task by providing reference as to how to go about accomplishing the aforementioned. By stepping through the information you will learn how to analyze the problem, be advised of several issues that may have relevance in regard to your creative task, and understand how to determine priorities. A useful exercise to perform at the outset of a project is to write a list of preliminary design criteria to while your first impression of the task at hand remains fresh in your mind. Design Planner allows you to enter your information directly within application (top left), to be used later when specifying final design criteria used to develop goals.

Upon completion of the text regarding a mission statement Design Planner will provide a field in which you can write your project Mission Statement (lower left). A template structure will be provided for you at this time to help you formulate your thoughts into an effective mission. Also, you will have the option of seeing an example mission statement for further assistance, printing a copy of the screen to use as a notetaking device away from the computer, or printing only one field. The examples included are both metaphorical and literal. The metaphorical elaborates on the brick metaphor utilized throughout the application, while the literal is an excerpt from the original Design Planner proposal.
Preface

System Requirements:
Hardware
Macintosh computer system, compatible monitor.

Software
Hypercard 2.0, Design Planner.

Release information:
Design Planner is copyright 1992, Roy Prochaska Jr., and not available for commercial reproduction as of yet. Permission for use has been granted to the Department of Graphic Design and the Media Resource Center At Rochester Institute of Technology. For information regarding obtaining the software contact:
R. Prochaska Jr. 8730 Nashville, Oak Lawn IL, 60453
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Prior to the development of this application there was no tool designers could utilize to assist in the design process, and ensure clearly defined objectives were successfully achieved within each assignment. Without considering the original communication objectives of a project it is impossible to measure the outcomes' true success, thus the creative effort is devalued, and perhaps not appropriate.

Design Planner will go a long way toward making sure the creative effort is focused on the correct target, and that the product does in fact achieve critical communication objectives.

The ultimate purpose of Design Planner is to improve the quality of graphic communications. It does so by providing users with a format in which they are continuously reminded of critical design planning and management issues, as well as their own projects' objectives.

The application itself is part of a much broader context, that of project planning, management, and evaluation activities. The diagram at left illustrates the a total systems plan adapted to The Creative Process, of which design planner is a product. Design Planner is the creative symphony of the underlying subprocesses in the total plan applied to the creative process.
Design Planner

Creative Planning Process Diagram

Design Planner Process Diagram
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Hypercard Basics

The Hypercard interface developed by Apple Computer Inc. utilizes a metaphorical approach to the organization and translation of information. The metaphor is a 'note card', and each completed project is termed a 'stack' referring to a pile of note cards.

Hypercard is a developmental tool for authors of interactive interfaces, as well as a tool for everyday system improvements, scheduling, etc. Hypercard is very powerful in that it allows the designer to control the way the user interacts with information.

The concept of user driven information is called interactivity, the user is physically interacting with the information by clicking on buttons that control navigation. By using the mouse to point and click on buttons appearing on the screen the user can control movement throughout any Hypercard application. Buttons may be indicated by a border outline of many different sizes and shapes, can be labeled with text, and can also carry an easily identifiable icon, such as a forward arrow meaning 'go to the next card in the stack'.

Hypercard provides textual information in what are called 'fields'. Fields exist on cards and contain relevant verbal information. When you are asked 'Print a field?' for example, Hypercard is actually asking you to choose one of many fields that you would like to have a printout of.

As mentioned earlier, Hypercard projects are called 'stacks'. A stack can function by itself, moving only to cards in itself, or may also work with separate stacks, and their respective cards. Many applications developed in Hypercard are actually multiple 'stacks' working together when necessary. This is the case with Design Planner.

This application consists of eight unique stacks that work together based on user input. When starting the application the 1st time user should double-click the mouse on either the 'dp intro', or 'teaser' stack.

Within every interactive interface the need arises to provide a visual context detailing the structure of the information within an application. Due to the 'interactive' nature of Hypercard applications, users will move freely through the information, accessing what is most important at a given time. In order to be certain the user doesn't lose touch with where he is within the application it is necessary to include a navigational tool. This need is satisfied by the 'Design Planner Map'.
Design Planner
Context

Design Planner belongs in the context of other interactive applications designed to assist users within a given area of specialty. Similar commercial applications include; Biz Plan Builder, Idea Fisher, and MacProject.

Design Planner was developed to assist users in developing and articulating an effective creative process. After using the application designers will have produced a project proposal that can be used in client interaction, and as a personal creative problem solving tool. The completed proposal will include: Mission Statement, Goals, Objectives, Indicators of Success, and Processes and Strategies of Implementation.

In the process of writing the proposal users will learn about the creative process and develop a systematic problem solving approach to the creative process. By evaluating a proposal, designers will also provide a standard against which to evaluate their work in terms of its effectiveness at meeting the projects original communication objectives. If used properly Design Planner is a very powerful tool, and will help greatly to ensure each creative endeavor is answered with an effective visual solution.

Design Planner will assist users in developing a project proposal that will define the specific objectives of the project. Without considering the original communication objectives of a task it is impossible to measure the outcomes true success, thus the creative effort is devalued, and perhaps not appropriate. Design Planner will go a long way toward making sure the creative effort is focused on the correct target, and that the product does in fact achieve critical communication objectives.

The ultimate purpose of Design Planner is to improve the quality of graphic communications. It does so by providing users with a format in which they are continuously reminded of critical design planning and management issues, as well as their own projects’ objectives.

Design Planner is a powerful tool that has the power to function on two levels. It first functions as a teaching device by providing instruction about the process of writing a successful project proposal. Secondly, it functions as a production tool for the more experienced user. By using the interface the user can be continually reminded of key factors relating to the assignment at hand as well as produce the proposal in the same application, thus improving the final solution as well as saving time. By providing a user friendly and highly informative interface Design Planner will help improve the quality of visual communications by streamlining an often
Mission Statement

The first step in the proposal development process is to develop a Mission Statement for the project. The ideal project mission statement will address the following issues: Who, What, Where, When, How, and Why. Who is the target audience? What will your project do? When will the project be complete? Where will the project be implemented? Why are you proposing the project? How are you going to accomplish the projects' goals and objectives?

The application will assist you in completing this task by providing reference as to how to go about accomplishing the aforementioned. By stepping through the information provided about how to write a mission statement you will learn how to analyze a problem, be advised of several issues that may have relevance in regard to your creative task, and understand how to determine priorities. A useful exercise to perform at the outset of a project is to develop a listing of preliminary design criteria after discussing the problem with the client, and while your first impression of the task at hand remains fresh in your mind. Design Planner allows you to enter your information directly within application (top left), to be used later when specifying final design criteria used to develop goals.

Upon completion of the text regarding a mission statement Design Planner will provide a field in which you can write your project Mission Statement (lower left). A template structure will be provided for you at this time to help you formulate your thoughts into an effective mission. Also, you will have the option of seeing an example mission statement for further assistance, printing a copy of the screen to use as a notetaking device away from the computer, or printing only the field. The examples included are both metaphorical and literal. The metaphorical elaborates on the brick metaphor utilized throughout the application, while the literal is an excerpt from the original Design Planner proposal.
Goals

Project Goals support the mission statement. After you have written your mission statement Design Planner will ask you to move on and write your Goals. As in the mission stack you will first be provided with information regarding how to write effective project goals.

As you learn about the importance of project Goals you will be instructed in the importance of a hierarchy of goals, the purpose of a utopian vision, how goals relate to objectives, and finally how to articulate your own project goals.

Once you have received your instruction you will need to write your final design criteria, that will then assist you in writing your objectives. Your preliminary criteria will be provided for reference at this time. You will write your Goals in relation to your Final Design Criteria. Be certain to satisfy each of your criteria with a goal statement. This will ensure that you are writing goals to accomplish each of the criteria you have deemed important to a successful solution. Again as in the mission statement, you will be provided with a template structure to refer to, along with examples, and the ability to print notes, etc.
Objectives

After completing the goals section of the application you will have written a mission statement and relevant goals for your project. In doing so you will have defined the problem, accepted the task, become aware of possible constraints, and formed a vision of what a successful solution might be. Furthermore you will have specified design criteria for the project in the form of goals. Achieving each goal will then guarantee that your creative solution meets the client's needs.

The process of writing Objectives will help you to articulate the specific effect your solution will have upon the target audience. Objectives should be written to achieve the desired state defined in each of your project goals. An objective is a description of a performance or action you want the audience to be able to demonstrate before being considered competent. An objective describes an intended result of a process undertaken. "Objectives are useful tools in the creation, implementation, and evaluation of a design solution. They point to the content and procedures that will lead to successful design, in helping to manage the design process itself, and in helping to prepare the means of determining whether or not the solution is successful in terms of the communication needs that facilitated the work to begin with." — who are you quoting?

Design Planner will help you to write effective objectives by providing you with a brief education about the purpose and benefits, qualities, and importance of project objectives. You will be instructed in each of the major components of an effective objective; performance, conditions, and criteria.

As was the case in the two previous sections you will be afforded the opportunity to write your objectives within the application. (at left) In addition to seeing an example, reviewing the instruction by clicking 'help', or printing notes of a specific field, you will also have access to a listing of 'action verbs'. The scrolling field to the left of the card will assist you in articulating your objectives as specifically as possible. Also provided for reference are your project Goals. Remember to define objectives for each of your goals.
Preface

System Requirements:

Hardware
Macintosh computer workstation, compatible monitor.

Software
HyperCard 2.0, Design Planner.

Release information:
Design Plannere, copyright 1992, Roy Prochaska Jr., and is not available for commercial distribution. Permission for use has been granted to the Department of Graphic Design, and the Media Resource Center at Rochester Institute of Technology. For information regarding obtaining the software contact: R. Prochaska Jr. 8730 Nashville, Oak Lawn IL, 60453.
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HyperCard Basics

The HyperCard interface developed by Apple Computer Inc. utilizes a metaphorical approach to the organization and translation of information. The metaphor is a note ‘card’, and each completed project is termed a ‘stack’ referring to a pile of note cards.

HyperCard is a developmental tool for authors of interactive media applications as well as a tool for everyday system improvements, scheduling, etc. HyperCard is very powerful in that it allows the designer to control the way the user interacts with information, providing many choices for the user.

The concept of a user-driven interface is called "interactivity", the user is physically interacting with the information by clicking on buttons that control navigation. By using the mouse to point and click on buttons appearing on the screen the user can control movement throughout any HyperCard application. Buttons may be indicated by border outlines of many different sizes and shapes, can be labeled with text, and can also carry an easily identifiable icon, such as a forward arrow meaning ‘go to the next card in the stack’.

HyperCard provides a position for textual information in areas called ‘fields’. Fields exist on cards and contain relevant verbal information. When you are asked ‘Print a field?’ for example, HyperCard is actually asking you to choose one of many fields that you would like to have as hard copy.

As mentioned earlier HyperCard projects are called ‘stacks’. A stack can function by itself, moving only to cards in itself, or may also work with separate stacks, and their respective cards. Many applications developed in HyperCard are actually multiple ‘stacks’ working together when necessary. Design Planner operates in this manner. This application consists of eight unique stacks that work together based on user input. When starting the application the 1st time user should double-click the mouse on either the ‘dp intro’, or ‘teaser’ stack.

Within every interactive interface a visual context should be provided. This details the structure of the information within the application. Due to the 'interactive' nature of a HyperCard application users can move freely through the information, accessing what is most important at any given time. To ensure that the user does not lose touch with their location within the application it is necessary to include a navigational tool. This need is satisfied in Design Planner by the "Design Planner Map".
Design Planner®
Context

Design Planner belongs within the context of other interactive applications designed to assist users within a given area of specialty. Similar commercial applications include; Biz Plan Builder (a business plan developmental tool), Idea Fisher (a creative brainstorming application), and MacProject (a project scheduling tool).

Design Planner was developed to assist users in developing and articulating an effective creative problem-solving process. After using the application designers will have produced a project proposal that can be used in client interaction, and as a problem solving tool. The completed proposal will include: Mission Statement, Goals, Objectives, Indicators of Success, and Processes and Strategies of Implementation.

In the process of writing a project proposal users will develop a systematic problem solving approach to the creative process. Designers will also provide a standard against which to evaluate their work in terms of its effectiveness at meeting the projects original communication objectives. If used properly Design Planner is a very effective evaluation tool, and will help greatly to ensure each creative endeavor is answered with an appropriate visual solution.

Design Planner will assist users in developing a project proposal that defines the specific objectives of a project. Without considering the original communication objectives of a task it is impossible to measure true success. Therefore the creative effort is devalued, and perhaps not appropriate. Design Planner will provide support in order to make sure the creative effort is focused on the correct target. In this way Design Planner ensures the product does achieve critical communication objectives.

Design Planner also has the ability to function on two levels. First, if functions as a teaching device by providing instruction in the process of writing a successful project proposal. Secondly, it functions as a production tool for the more experienced user. By using the interface the user can be continually reminded of key factors relating to the assignment at hand as well as produce the proposal simultaneously, thus improving the final solution as well as saving time. By providing a user friendly and highly informative interface Design Planner will help to improve the quality of visual communications by streamlining an often neglected exercise in the creative process, that of planning and goal setting. If a designer is without a clear vision of what is to be accomplished by a given product at the project's inception it is almost certain the outcome will not be as effective as it could/should be.
Design Planner

The Creative Planning Process

Manage

Evaluate and make decisions

Conduct project

Design and plan evaluation strategies

Assess needs

Develop / Apply rationale and standards

Design

Implement the planned design process

Design Planner Process Diagram.
Introduction to
Design Planner®

This application will help you to formulate and articulate your design process in a problem solving approach through a series of steps. After using Design Planner you can expect to have written a project proposal that will include: a project Mission Statement, Goals, Objectives, Indicators of Success, and Processes and Strategies of Implementation.

The primary focus of Design Planner is to help in writing an effective project proposal plan, that, if adhered to, will ensure a project's success in terms of its true communication objectives. Keep in mind that the project has only just begun at the time the proposal has been fully articulated, and the proposal should be referred to throughout the creative process and can be revised if necessary.

The diagram at top left is a visual representation of the Creative Planning Process and is designed to demonstrate the different components of a successful project management plan. The Design Planner application should be seen in context with the total process. It is the product of a synthesis of the many different activities conducted within each phase of the Creative Planning Process.

The Design Planner Process Diagram at lower left is a visual representation of the dynamic project planning process adopted by the application. The user first writes a mission statement. Goals are then articulated to achieve the mission. Objectives are formulated to satisfy each goal. Indicators of Success are necessary in order to measure success in terms of the original objectives. Lastly the user defines the process by which all of the above will be achieved, including developing a timeline, a budget, and a process of implementation.

A description of how to navigate through the application is provided below. Each title refers to the name of a button within the application, and then explains the result of clicking on that particular button.

MAP - will bring you to the main navigational map (illustrating all of Design Planners' components), and allow you to navigate throughout the application.
BACKWARD ARROW - will allow you to move backward to the card preceding the one you are currently on.
FORWARD ARROW - will allow you to move forward to the next card.
QUIT - allows you to quickly exit Design Planner, and HyperCard.
RETURN - allows you to return to the card from which you came.
Introduction to
Design Planner

On certain cards the buttons in the main navigational area will vary from the standard five listed previously. An introduction to buttons you will see in special situations has been provided below.

EDIT - will take you directly to the card where you enter text (within each area) ex: click "edit" when in the "Objectives" stack to go to the "Write Objectives" card. This button is most useful when re-entering the application to make changes to your proposal.

EXAMPLE - will allow you to see an example of the subject currently being addressed. ie: clicking on 'example' while working in "Goals" will show you an example of a goal.

PRINT - will bring you to the print stack, allowing you to title your proposal and print a copy of your document, or save a copy of your proposal as a HyperCard stack or as a word processing document.

PRINT NOTES/FIELD - will allow you to print a copy of the card you are currently on, (or in cases of long fields unable to be seen on the screen 'print field' will produce for you a copy of the text in its entirety) Use this function to print certain cards or fields you may wish to have to use as worksheets when developing your proposal.

SAVE A COPY - allows you to retain a copy of your proposal as a HyperCard stack, or as a word processing document.

After entering the main portion of the application you will notice a new group of buttons appear under the central text field, at the bottom of the screen. The five buttons will allow you to move freely between the five major components of in the application.

The field at left is the "Map", and functions as the main navigational tool. At any time you may refer to it, and use it to go directly to any area within the application. First time users of the application should take the time to read the information in each area, and begin at the "Mission Statement." Upon completion of your proposal you may save it for later reference, and print a copy for your own personal use, or for a client.
Specify Preliminary Design Criteria.

Write a Mission Statement.
Mission Statement

The first step in the proposal development process is to write a Mission Statement for the project. The ideal project mission statement will address the following issues: Who, What, Where, When, How, and Why? Who is the target audience? What will your project do? When will the project be complete? Where will the project be implemented? Why are you proposing the project? How are you going to accomplish the projects' goals and objectives?

The application will assist you in completing this task by providing reference as to how to go about accomplishing the aforementioned. By stepping through the information provided about how to write a mission statement you will learn how to analyze a problem, be advised of several issues that may have relevance in regard to your creative task, and understand how to determine priorities. A useful exercise to perform at the outset of a project is to develop a listing of preliminary design criteria after discussing the problem with the client, and while your first impression of the task at hand remains fresh in your mind. Design Planner allows you to enter your information directly within the application (top left), to be used later when specifying final design criteria used to develop goals.

Upon completion of the text regarding a mission statement Design Planner will provide a field in which you can write your project Mission Statement (lower left). A template structure will be provided for you at this time to help you formulate your thoughts into an effective mission. Also, you will have the option of seeing 1) an example mission statement for further assistance, 2) printing a copy of the screen to use as a notetaking device away from the computer, or 3) printing a single field. The examples included are both metaphorical and literal. The latter elaborates on the brick metaphor utilized throughout the application, while the former is an excerpt from the original Design Planner proposal.
In the previous section you were asked to develop a list of Preliminary Design Criteria. The purpose of doing so was to get you thinking about your project's goals at an early stage. As you can see, your original design criteria have been provided below for reference when specifying your Final Design Criteria. Your final criteria will be useful in writing Goals by helping you to specify in terms of goals each of your important design criteria.

Preliminary Design Criteria

Final Design Criteria

Specify Final Design Criteria.
Goals

Project Goals support the mission statement. After you have written your mission statement Design Planner will ask you to move on and write your Goals. As in the mission stack you will first be provided with information regarding how to write effective project goals.

As you learn about the importance of project goals you will be instructed in the organization of a hierarchy of goals, the purpose of a utopian vision, how goals relate to objectives, and finally how to articulate your own project goals.

Once you have received your instruction you will write your final design criteria, that will then assist you in writing your objectives. The preliminary criteria you have established will be provided again for reference at this time. (top left)

Goals will be written in relation to your final design criteria. Be certain to satisfy each of your criteria with a goal statement. This will ensure that you are writing goals to accomplish each of the criteria you have deemed important to a successful solution. Again, as in the mission statement, you will be provided with a template structure to refer to, along with examples, and the ability to print notes, etc. (lower left)
Write Objectives.
Objectives

So far you have written a mission statement and relevant goals for your project. In doing so you will have defined the problem, accepted the task, become aware of possible constraints, and formed a vision of what a successful solution might be. Furthermore you will have specified design criteria for the project in the form of goals. Achieving each goal will guarantee that your creative solution meets the clients needs.

The process of writing objectives will help you to articulate the specific effect your solution will have upon the target audience. Objectives should be written to achieve the desired state defined in each of your project goals. An objective is a description of a performance or action you want the audience to demonstrate before being considered competent. It describes an intended result of a process undertaken. Objectives are useful tools in the creation, implementation, and evaluation of a design solution. They point to the content and procedures that will lead to successful design, in helping to manage the design process itself, and in helping to prepare the means of determining whether or not the solution is successful in terms of the communication needs that facilitated the work to begin with.

Design Planner will help you by providing a brief education about the purpose and benefits, qualities, and importance of project objectives. You will be instructed in each of the major components of an effective objective: performance, conditions, and criteria.

As was the case in the two previous sections you will be afforded the opportunity to write your objectives within the application. (at left) In addition to seeing an example, reviewing the instruction by clicking 'help', or printing notes of a specific field, you will also have access to a listing of 'action verbs'. The scrolling field to the left of the card will assist you in articulating your objectives as specifically as possible. Also provided for reference are your project Goals. Remember to define objectives for each of your goals.
Write Indicators of Success.

At least one "Indicator of Success" should be listed for each objective. The ideal success indicator will communicate what level of accomplishment must be demonstrated by the audience in order to consider a given objective achieved.

Objectives

Indicators of Success
Indicators of Success

Indicators of Success are the method by which you will define standards to be used in evaluating the effectiveness of your creative solution. This step is an integral part of any planning management process. Without comparison to the state of the issue before the project, it is impossible to determine if anything has been achieved, quantitatively or qualitatively. Evaluation will lend credibility to your efforts by providing a forum in which to illustrate why your solution is appropriate, effective, and successful. Success indicators can be used to measure the project’s outcome against the previous condition (summative evaluation), or used to monitor progress during the design process (formative evaluation).

Design Planner will provide you with information about the process of specifying Indicators of Success, their use, and further insight as to why they are a necessary component of any project proposal. You will also receive instruction as to how to maximize the benefits of writing success indicators.

The application will provide an area for you to write your Indicators of Success. Remember that the purpose of this step is to articulate what level of comprehension must be demonstrated by your target audience for you to consider each objective successfully achieved. Remember to define indicators of success for each objective.
Write a Timeline.

Write a Budget.
Processes and Strategies of Implementation

The last component of the proposal assists you in generating a Process and Strategy of Implementation that consists of three parts: a Timeline (at left), a Budget (at lower left) and a General Process and Strategy (below). This area is more open to interpretation than were the mission, goals, objectives, and indicators of success. Each of the components of your Process and Strategy of Implementation can be addressed very specifically, or on a much broader scale. The importance lies in developing a general process, a budget, and a timeline tailored to your given project.

Instruction is provided about the process of developing a timeline, and a listing of possible related factors is included to remind you of key milestones in the development of your project. Similar instruction and reminders are provided in relation to your General Process and Strategy, and Budget. The illustrations at left and below reference the areas in which you will perform each of the above mentioned tasks.
Add an Appropriate Title.

Make Final Revisions, Print, Save.
After having completed the process of writing your proposal, or any time you would like to save your work for later use, or quit the application, you will be brought to the Print stack. This stack consists of two cards, a titling card (upper left), and card on which you can view the completed proposal. The title card (lower left) allows you to enter the appropriate heading to your proposal. The next card will allow you to view your proposal in its entirety. You will see that the information you had entered in each of the previous sections of the application has been returned for you. At this time you can make any final refinements you deem necessary, or make typographic adjustments to your proposal by using the pull-down HyperCard menus. You can also save your proposal as a HyperCard stack (which will consist of the two cards in the current stack with your information retained), or as a text file for use in a standard word-processing application. Another option provided is the ability to print the proposal from within HyperCard.
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Appendix 12

Design Planner® Software