Translating Needs Statements into Project Goals

Your analysis activities should identify the needs – both instructional and non-instructional – that can realistically be addressed, as well as the characteristics of the target learners and the instructional contexts and content (these last three analyses are covered in Chapters 3, 4 and 5). As the designer, you consider the information from all these analyses and translate the resulting needs into **goal statements** that can be reviewed and approved by key stakeholders. Below is a list of factors that can shape goals, followed by three examples of project needs statements and the resulting instructional goal statements. Following the examples, you will be given a chance to evaluate the appropriateness of goal statements for stated needs.

|  |  |
| --- | --- |
| ***What type of factors can shape goals***? | |
| * The needs and characteristics of the target learner(s); * The needs of the organization; * Applicable learning standards for a federal, state, district or local school system; * Certification, competency or accreditation requirements; * The best practices identified for a particular field; | * Requirements established by funding sources; * The needs of current and future employers; * The requirements of post-secondary and graduate institutions; * The needs of a society; and * Best practices. |

Three Examples: Going from needs analysis to goals

**Example #1 –** *Getting ready for the art market: Preparing a successful artist’s portfolio*

**Contributed by:** Almut Haboeck, © 2008.

**Statement of Need:** Due to the increasing commercialization of art and the increasing competitive nature of the art world the new generation of art students has to be more aware than ever of the extra-curricular skills they will need to enter the market or embark on an academic career. Besides their talents and skills as artists (painters, sculptors, print makers, multimedia artists), they have to be able to represent themselves and their art to the institutions (museums, galleries, residencies, universities). They also need to be able to convince these art institutions that they and their art will be a valuable asset and a future investment. However, most of the art students lack knowledge about what it really means to “enter the art market” and how to go about entering it. Often, they are rather clueless when they leave the nurturing academic environment because they lack knowledge of the world waiting outside. This results from the fact that none of these skills (including the skill to represent oneself and one’s work, i.e., to “sell oneself and one’s product”) are taught within the usual art curriculum at a university or college. Therefore, a course is seriously needed which prepares graduating art students for their entrance into the “job market.”

This type of course would provide graduating art students with the means to represent themselves and their art in the form of an artist’s portfolio as the required standard application in the art world. Such a course would provide better preparation for the next generations of art graduates and future artists in their attempts to enter and shape their community of practice. It will also prepare them for their own particular “job market” with a stronger sense of themselves and their work, including a better understanding of their own positioning in the artistic community.

**Goal Statement:** Teach art students how to successfully represent themselves and their art through a portfolio.

**Example #2 –** *Native American Tribes in Tennessee History*

**Contributed by:** Elizabeth Bradley, © 2008.

**Statement of Need:** Each year, Native American tribes are studied as a part of the normal fourth grade social studies curriculum in Tennessee. The designer noticed that there was a definite lack of information concerning the tribes as differentiated and separate groups of people, and, after receiving confirmation from a Subject Matter Expert, decided to create a new instructional design that addressed this lack of learning content.

**Goal Statement:** Fourth grade students (ages 9-10) will learn about Native American tribes who lived/live in Tennessee, discuss different aspects of each tribe and the effects Native Americans have had on the cultural landscape of Tennessee, and will come to appreciate and respect the role of Native Americans in Tennessee.

**Example #3 –** *Compositing 3D Computer Graphics into a 2D Computer Graphics Software Environment*

**Contributed by:** Anonymous

**Statement of Need:** 3D graphics are being incorporated into the graphic designer’s software toolkit in various forms. Adobe recently released Photoshop Extended (CS3 and CS4), which incorporates 3D features aimed at graphic design (and also animation) professionals. Adobe Illustrator has featured tools for making 3D objects for the past couple of versions. While the big 3D software companies, such as Maxon and Autodesk, mainly gear their software toward the animation, film/ TV and the architecture industries, they are increasingly spotlighting and showcasing how their software can be incorporated into the world of print and graphic design. Many of the graphic artist jobs that are emerging (especially in advertising, architecture and government contracting) require not only knowledge of the standard graphic design packages but also web design software knowledge and 3D graphics software knowledge.

The instructional designer has determined the needs of the target learners through past experience in the industry and through informal interviews and conversations with graphic design students and professionals. The designer will be able to confirm the needs and verify or dispute the assumptions about their prior knowledge of compositing 3D graphics into 2D graphics projects through the means mentioned earlier. The assumptions are that some graphic design students and graphic design professionals incorporate 3D graphics into 2D graphic design projects but many avoid 3D graphics due to the perceived complexity of 3D software packages. Cost is also a factor, as 3D software packages are usually much more expensive than graphic design software.

**Goal Statement:** Working graphic design professionals and current graphics students will be able to successfully complete all the steps necessary to composite 3D graphics into a 2D graphics software environment using knowledge learned in the instructional setting.

Now It’s Your Turn:

Examine the needs listed in the following chart and evaluate which of the goal statement options best addresses the stated need. Identify whether the need described is instructional or non-instructional in nature and record your rationale for your selection of the best goals to meet the needs. A wide range of factors shape goals, so it is important to consider the results of *all* the different analyses as you develop the instructional goals. After recording the rationale for your choices, view the following page of this exercise to compare your choices and rationale with our thoughts on the best need/goal statement match.

| **Needs** | **Additional Information from Needs Assessment** | **Instructional or Non-Instructional?** | **Goal Statements**  ***Based on the needs, which goal do you think is better?*** |
| --- | --- | --- | --- |
| Company X determined that they were losing valuable competitive knowledge when employees retired or quit. They developed a Knowledge Management (KM) system but employees are not using it. Management has suggested that you develop a training program so employees know how to use the KM system. | * Employees report that they find the KM system complex and don’t see a purpose for it. * Confidentially, some employees have expressed the belief that the KM system is designed to take their job. * Employees are typically not aware of the KM job aids and tutorials. |  | 1. Provide problem-based scenario training on the KM system that incorporates the use of job aids resident on the system. Provide training on using the system for project collaboration, workflow records, and to learn new skills. |
| 1. Provide problem-based scenario training on the KM system that incorporates the use of job aids resident on the system. Provide training on using the system for project collaboration, workflow records, and to learn new skills; AND 2. Management will provide assurances that the KM system is not designed to replace any current job positions in the company. |
| Two Rivers Elementary School has failed to meet Adequate Yearly Progress (AYP) for the first time in its 50 year history. Previous year scores were adequate. School Board members are concerned and have asked for remedial programs at each grade level. | * In just one year, several major employers have gone out of business in the county and as a result, the average income of the population served by Two Rivers Elementary has dropped. * Teachers report that students’ ability to focus in class has decreased over the past year. Many students are coming to school without having had breakfast and many say their parents are unemployed or are working multiple jobs. |  | 1. Provide low-to-no-cost breakfasts at school and early bus service for qualifying low-income elementary students to improve their ability to concentrate in school. |
| 1. Provide before- and after-school remedial classes in reading and math. |
| Cloud Catcher Airlines has a fleet of five small planes that provide charter service into remote island areas in the South Pacific and the Antarctic for eco-tourists and researchers. In the company’s ten year history, there have been a total of six plane accidents, all due to mechanical problems. The president feels this is unacceptable and wants future years to be accident-free. | * The maintenance crew has five mechanics, one for each plane. Three of the mechanics have been with the company since its start, and the other two started last year. * The original planes have gradually been replaced with turbo-prop powered aircraft with short-field capabilities for use in unimproved areas. * All accidents resulted from either a lack of regular maintenance or improper maintenance procedures. * The two new mechanics previously worked on large, commercial airliners and have had informal training on the company planes from the existing mechanics. The three senior mechanics have always worked on small planes but have not had any formal training on the newer turbo-prop planes. |  | 1. Reduce aircraft accidents due to preventable mechanical failures by increasing the manpower assigned to routine maintenance tasks. |
| (b) Reduce aircraft accidents due to preventable mechanical failures by sending mechanics to maintenance training for the turbo-prop aircraft in the company’s fleet. |

***[View our choice of best goals on the next page of this exercise.]***

***We’ve shaded our choice of the best goals, below:***

| **Needs** | **Additional Information from Needs Assessment** | **Instructional or Non-Instructional?** | **Goal Statements**  ***Based on the needs, which goal do you think is better?*** |
| --- | --- | --- | --- |
| Company X determined that they were losing valuable competitive knowledge when employees retired or quit. They developed a Knowledge Management (KM) system but employees are not using it. Management has suggested that you develop a training program so employees know how to use the KM system. | * Employees report that they find the KM system complex and don’t see a purpose for it. * Confidentially, some employees have expressed the belief that the KM system is designed to take their job. * Employees are typically not aware of the KM job aids and tutorials. | Both | 1. Provide problem-based scenario training on the KM system that incorporates the use of job aids resident on the system. Provide training on using the system for project collaboration, workflow records, and to learn new skills. |
| 1. Provide problem-based scenario training on the KM system that incorporates the use of job aids resident on the system. Provide training on using the system for project collaboration, workflow records, and to learn new skills; AND 2. Management will provide assurances that the KM system is not designed to replace any current job positions in the company. |
| Two Rivers Elementary School has failed to meet Adequate Yearly Progress (AYP) for the first time in its 50 year history. Previous year scores were adequate. School Board members are concerned and have asked for remedial programs at each grade level. | * In just one year, several major employers have gone out of business in the county and as a result, the average income of the population served by Two Rivers Elementary has dropped. * Teachers report that students’ ability to focus in class has decreased over the past year. Many students are coming to school without having had breakfast and many say their parents are unemployed or are working multiple jobs. | Non-instructional | 1. Provide low-to-no-cost breakfasts at school and early bus service for qualifying low-income elementary students to improve their ability to concentrate in school. |
| 1. Provide before- and after-school remedial classes in reading and math. |
| Cloud Catcher Airlines has a fleet of five small planes that provide charter service into remote island areas in the South Pacific and the Antarctic for eco-tourists and researchers. In the company’s ten year history, there have been a total of six plane accidents, all due to mechanical problems. The president feels this is unacceptable and wants future years to be accident-free. | * The maintenance crew has five mechanics, one for each plane. Three of the mechanics have been with the company since its start, and the other two started last year. * The original planes have gradually been replaced with turbo-prop powered aircraft with short-field capabilities for use in unimproved areas. * All accidents resulted from either a lack of regular maintenance or improper maintenance procedures. * The two new mechanics previously worked on large, commercial airliners and have had informal training on the company planes from the existing mechanics. The three senior mechanics have always worked on small planes but have not had any formal training on the newer turbo-prop planes. | Instructional | 1. Reduce aircraft accidents due to preventable mechanical failures by increasing the manpower assigned to routine maintenance tasks. |
| (b) Reduce aircraft accidents due to preventable mechanical failures by sending mechanics to maintenance training for the turbo-prop aircraft in the company’s fleet. |