

	Beginning In This Area	Nearing Competency	Competent	Expert
Function	Dimensions for a full size chair were developed and an attempt to apply them to the full size chair were made.	The chair's dimensions are appropriate for 150 pound person. Attempts were made to make sitting comfortable.	All the chair's dimensions are appropriate for a 150 pound person to sit in comfortably. The back & seat have no protrusions that interfere with comfortable sitting. The seat/back angle and other aspects of design are developed with comfort in mind.	
Structure:	Evidence suggests that there was a plan for the seat and back to support a 150 pound person seated in the center of the seat.	The seat holds a 150 lb. person without failing as long as that person is seated in the center of the seat. An honest and thoughtful attempt was made to build a back with a structure capable of supporting a person leaning back on it.	The seat holds a 150 lb. person without failing even when the sitter is not located centrally. The back supports a sitter leaning on it. Both structures work as long as the load is relatively static.	The seat can support a 150 lb. person whose weight is centered anywhere on the chair's seat. The seat and the back can support a load that is somewhat dynamic load (ie. a not so careful sitting down and some movement on the seat and against the back.)
Aesthetics	Although not necessarily planned out ahead of time, the general line type of the chair is identified.	The line types used in the chair appear to be consciously used to enhance the expected and desired use of the chair.	The choice of the chair's line types and the aesthetic impact of them is explained in psychological terms, as discussed in the class reading from "Logic & Design."	Line was used to unify the chair's design and to suggest a spirit, theme, mood or other aesthetic theme. The use of these lines was intentional and its intended psychological impact was justified, based on reading "Logic & Design."
Economy	Some general ideas about how material could be used more economically without the sacrifice of strength are understood now that the chair is completed.	The chair design suggests that economy was a consideration in the design of the seat. A critique of the chair demonstrates an understanding of how less material could be used to accomplish the same or greater strength in the seat and back.	There is a minimal amount of waste or redundancy in the use of material as applied to the chair's structural strength in either the seat or back. An understanding of this economic use of material with consideration of strength of the back and seat is demonstrated.	The chair's design is considered to maximize its strength, function & aesthetic qualities while using the least amount of material practical to do its intended job. All decisions regarding economic use of material are justified.
Integrity	The primary objective was to complete the project the minimal effort and thought to its purpose or its impact on others.	An honest effort was made to produce a completed project on time. What was required was done to get complete the job.	The group (and its members) did its best to complete the project. Care was given to the organization & quality of the construction & assembly. Some thought was given to the purpose of a chair like this in the world.	An honest effort to complete the work and make the best possible chair is evident. The particular value of making chairs from cardboard, or lack of value was considered.
Making Trade-offs and other design decisions.	The structure of the chair was considered on its own. We did not really consider altering the structure/strength of the design for aesthetics or economy unless we had to.	Economy was the main design criteria considered in term of trade offs. Structure, and to some extent aesthetics were weighed against the amount of material available so as to make it possible to build without running out of material.	Structure, economy and aesthetics were given equal weight in the design of the chair. The structural members were designed to enhance the aesthetics wherever possible and vice versa. To a limited extent we assessed the design to determine whether material was being used in excess and if the specifications could be met with less material.	Serious weight was given to each of the 5 design criteria in regard to meeting or exceeding the Challenge's specifics & for each criteria on its own. For example we tried to reduce material use purely to save material. We considered sacrificing strength for aesthetic reasons. Issues such as comfort, environment and use, though not explicitly stated in the challenge were part of our decision making concerns.
Decision making			Decisions were made only when evidence of their impact was presented and evaluated. Test data was collected and considered when and where possible.	
The Group Process: Participation and Leadership				The group functioned as a team. Individuals acted responsibly and/or were held accountable to do their work efficiently, effectively and with respect of others. Leadership rotated as was appropriate to the work. Deadlines were set and met and a good record of the work, investigations and decisions was kept.