

## Appendix B

# Sample Components Matrix

Program/Course: \_\_\_\_\_ Activity: \_\_\_\_\_

Concepts Used in Technological Education	Major Areas of Study		
	Physical Products	Human Processes	Environmental Systems
<b>Structure</b>	Structure of product to be designed and built	Structure of collaborative group formed to design and build the product	Environmental factors that influence structure of product
<b>Material</b>	Materials used to build the product	Knowledge required by collaborative group	Environmental factors that influence selection of materials
<b>Fabrication</b>	Process of forming and assembling materials	Process of gathering data	Environmental factors that influence assembly of materials
<b>Mechanism</b>	Components of the product that allow it to work	Problem-solving and decision-making strategies	Environmental factors that influence design of the mechanism
<b>Power and Energy</b>	Resource that enables the mechanism to operate	Group-management procedures	Environmental factors that influence selection of an energy source
<b>Controls</b>	The means by which the mechanism is controlled	Time and resource constraints	Environmental factors that influence choice of control mechanisms
<b>Systems</b>	Interdependence among the parts of the product	Sharing of skills and resources among group members	Interdependence of the product and its surroundings
<b>Function</b>	The use for which the product is developed	Roles of group members	Effects on the environment of using the product
<b>Aesthetics</b>	Visual appeal of the product	Procedures that contribute to group enjoyment and creativity	Visual compatibility of the product with its surroundings
<b>Ergonomics</b>	Aspects of the design that allow the product to be used with the minimum of effort	Efficiency of group dynamics in accomplishing the task	Ways in which use of the product makes related tasks/activities easier

Adapted from Technological Education Curriculum Consortium of Ontario (TECCO), "A Broad-based Technologies Program Resource Document", Working Document (n.p.: TECCO, May 1994), p. 29.