

METHODOLOGY

The framework resulted from reviewing relevant literature, choosing a position, and developing a procedure that embraces the importance between sustainable development and landscape architecture.

Sustainable Development Framework

[Sustainable Development Framework Web-Page](#)

A recent study showed that the most prevalent framework for defining sustainable development is organized around three central themes of Environment, Society, and Economy (Cartwright, 2000). These themes are also consistent with ASLA’s Declaration on Environment and Development. In response, the theoretical underpinning for developing a sustainable development framework for landscape architects is categorized into Environmental, Social, and Economic considerations. Sustainable development is a concept for every scale, and landscape architects practice at many scales. Therefore, the framework is designed to be usable at a range of scales.

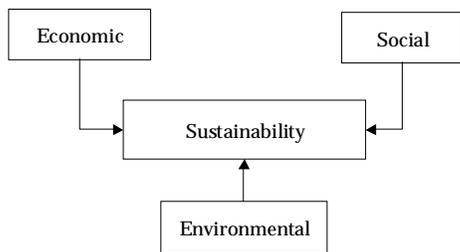


Figure 2 Components of Sustainability

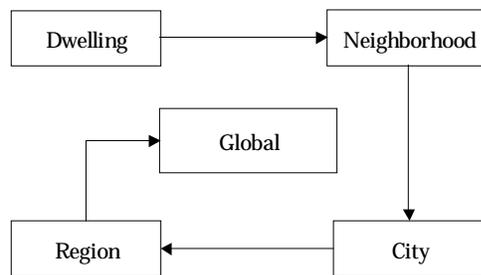


Figure 3 Scales of Sustainability

The framework contains four modules that will aid in this learning procedure for sustainable development. The sequencing of these modules is similar to the conventional design process that many landscape architects utilize on a routine basis, with the primary difference

being a more focused emphasis on aspects that significantly influence sustainability. The four modules are Research, Analysis, Design, and Evaluation. A description of each module is discussed below.

Research

The Research module has two primary objectives; one is to further the theoretical knowledge of sustainable development, and the other is to focus on how to implement sustainable development ideas. A similar approach was espoused by Joanne H. J. Kruijzen, of Delft University of Technology, The Netherlands, arguing for the combining of research and design. Solving for sustainable development means solving both theoretical and practical issues. Kruijzen says that “this type of research knows two objectives: (1) a scientific objective – an increase of knowledge, new insights and the development of a theory – and (2) a social objective – the implementation of sustainable development solutions in a social system” (Kruijzen, 1998). To achieve sustainable development, research must be conducted that informs the solution being implemented and in kind should seek to further broaden the knowledge and theoretical base.

Research for sustainable development begins with developing a general understanding of sustainable development issues. Next, additional research in a specific area may be needed in order to propose a design solution that will be effective. Finally, research must continue after the design has been implemented. Built projects offer a great medium for furthering the body of knowledge of landscape architecture and sustainable development.

Analysis

The Analysis component serves the purpose of critically inventorying and analyzing existing environmental features, social factors, and economic issues that are relevant to understanding the problem that is presented. In order to facilitate a more thorough undertaking

of issues that are of importance to sustainable development, a checklist that addresses these essential factors is utilized to aid the landscape architect.

The objective of the Analysis module is to inventory and analyze existing:

- Environmental features
- Social factors
- Economic issues

Based on this objective, an analysis checklist is included that is useful in addressing factors concerning the environment, society, and economy.

Design

An objective of this framework is not to limit the designer, but rather to augment the designer's existing palette with a greater emphasis in sustainable development and offer a means of approaching this issue. This approach is in response to the literature, which suggests that:

“In practice, the practitioner does not follow a given phase model. The practitioner needs building blocks to build his own pattern. To guide the practitioner in building his own structure, some ‘rules’ or guidelines are needed” (Kruijssen, 1998).

Design considerations are developed that aid in facilitating an approach to sustainable development and serves as the designer's ‘building blocks’.

Evaluation

The Evaluation module performs the function of assessing the effectiveness of the design. There are several methods of evaluation that are currently being developed and utilized to indicate progress towards sustainability. The Evaluation of design work is a critical component of the design process that often gets overlooked. For the purpose of this thesis, an approach that evaluates how the design relates to the framework is utilized. This allows the designer to ‘evaluate’ how successful a design is at addressing the framework's design considerations.