Case Study: Sustainable Scenic Practice at Sharjah Performing Arts Academy (SPAA) – *Seussical the Musical*

Case Study Author and Contributors

Author:
Candeta Bishop – Associate Programme Leader, Production Arts, Sharjah Performing Arts Academy (SPAA)

With input from:

- Michelle Bonn – Set Designer & Programme Supervisor
- Junaid Chaudhry – Scenic Construction Tutor
- Jacqui George – Mentor

Introduction

As the first dedicated performing and production arts conservatoire in the Middle East, Sharjah Performing Arts Academy (SPAA) is committed to pioneering sustainable theatre practices in the region. Recognising the environmental impact of traditional scenic production—particularly its reliance on single-use materials and high waste output—SPAA is embedding sustainability into its core pedagogy and production model.

In alignment with the UK *Theatre Green Book: Sustainable Productions*, SPAA aims to produce a minimum of four scenically sustainable shows per academic year. This case study examines Sustainability within the Scenic construction and Paint departments on *Seussical the Musical*, a production that tested our ability to balance creative vision with environmental responsibility.

Project Goals and Design Principles

For *Seussical*, our primary objective was to ensure that at least 80% of the set was constructed from repurposed materials—either whole set pieces from past productions or dismantled elements such as timber and steel that could be reconfigured. This approach aimed to:

- Reduce reliance on virgin materials
- Minimise expenditure on scenic resources
- Model circular design principles for students and staff
- Foster a culture of environmental accountability in design realisation

These goals align with circular economy principles in scenography (Alexander, 2022) and support the *Baseline to Intermediate* tiers of the Theatre Green Book model.

Additionally, we committed to using only existing scenic paints from our workshop inventory, challenging our team to mix bespoke colours in-house rather than purchasing new materials. This strategy reflects best practices in sustainable paint management (Weber & Munro, 2021).

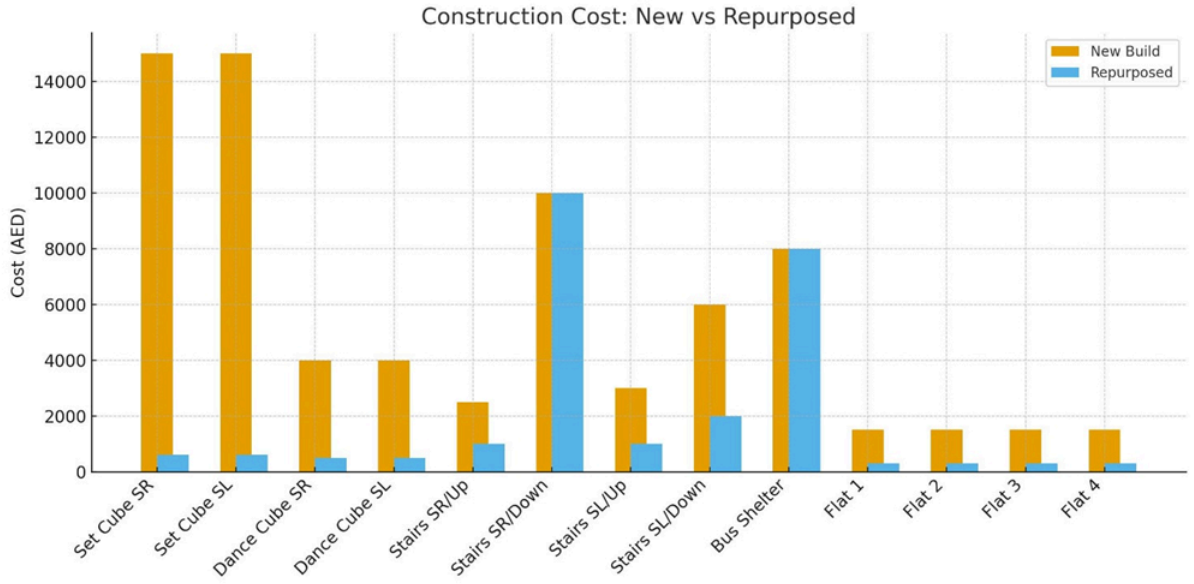
Outcomes and Learning Points

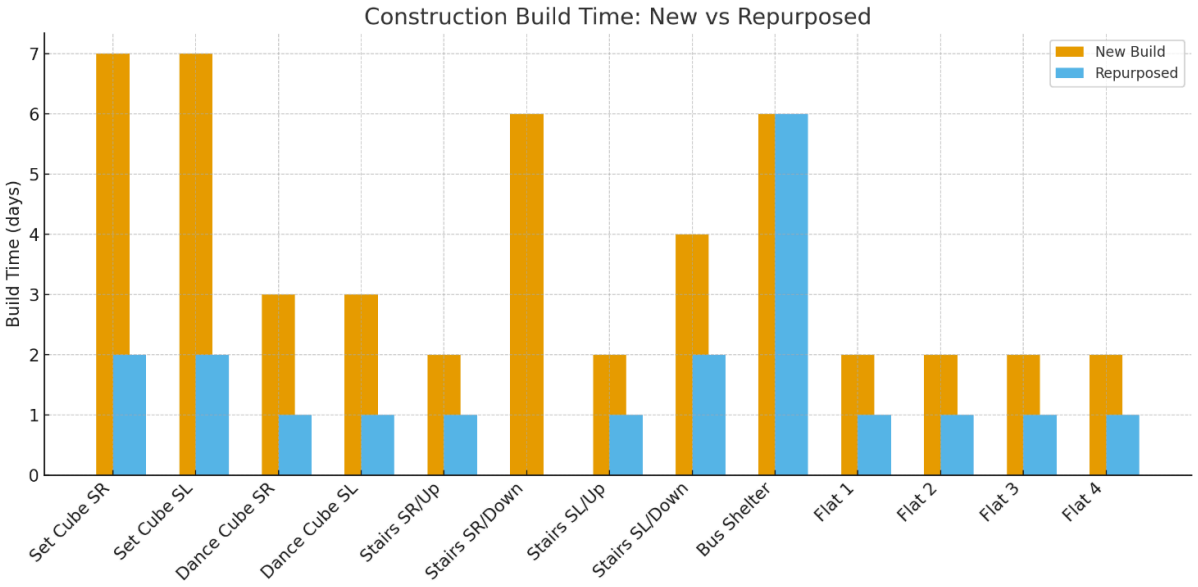
Quantitative Impact

The production involved 13 scenic elements, 11 of which were repurposed. Only 2 were built from scratch.

Construction cost /Time comparison					
Number of Scenic Pieces	**Material**	**Build time when building from new**	**Build time when repurposing materials**	**Material Cost of each set piece New**	**Material Cost of each set piece Modification**
Set Cube Stage Right	Steel & Wood	7days	2 days	15,000	600
Set Cube Stage Left	Steel & Wood	7 days	2days	15,000	600
Dance Cube SR	Steel & Wood	3Days	1 Day	4,000	500
Dance Cube SL	Steel & Wood	3 days	1Day	4,000	500
Stairs SR/upstage	Wood	2 Days	1Day	2,500	1000
Stairs SR/Downstage	Wood	6 Days	n/a	10,000	10,000
Stairs SL/Upstage	Steel/Wood	2Days	1Day	3000	1000
Stairs SL/Downstage	Wood	4Days	2 Days	6000	2000
Bus Shelter	Steel&Wood	6 Days	6 Days	8000	8,000
Flat 1	Wood	2 Days	1 Day	1,500	300
Flat2	Wood	2 Days	1 Day	1,500	300
Flat 3	Wood	2 Days	1Day	1,500	300
Flat 4	Wood	2 Days	1Day	1,500	300
Total		**48**	**25**	**73,500**	**25,400**

Total: 48 days (new build) vs 25 days (repurposed)
Cost: AED 73,500 (new) vs AED 25,400 (repurposed)





Paint: 60 litres of existing stock were reused. Only 6 litres of new acrylic were purchased due to precise colour requirements. The Green Book calculator scored this production at *Intermediate*.

Designer Feedback: **Michelle Bonn**

Michelle Bonn has consistently embedded sustainability into her design practice for many years. Her reflections on *Seussical* illustrate how repurposing influenced design outcomes, collaboration, and institutional culture.

Q1. How was your approach different?
Response: Michelle designed directly in response to stock materials already available, rather than designing “for design’s sake.”

Analysis: This aligns with Green Book principles, embedding sustainability at the design inception rather than as an afterthought.

Q2. Were aesthetics compromised or enhanced by reuse?
Response: "50/50." Height and vertical levels were limited, but creative problem-solving filled the gaps. Michelle noted that she enjoys this challenge.
Analysis: Constraints became a driver of innovation, reframing sustainability as opportunity rather than limitation.

Q3. Did repurposing enrich or limit the process?
Response: Enriching—design evolved from available resources rather than purely aspirational ideas.
Analysis: A resource-aware approach that models resilience and pragmatic creativity.

Q4. Did you find yourself compromising more than usual?
Response: Minimal compromise beyond reduced scope for height; instead she adapted to available resources.
Analysis: Compromise reframed as adaptation—evidence of creative agility.

Q5. Was the process more or less collaborative?
Response: More collaborative. Constraints encouraged teamwork, shared solutions, and collective ownership.
Analysis: Sustainability fostered institutional dialogue, modelling the teamwork valued in contemporary creative economies.

Educational and Operational Impact

The project functioned as a pilot, trialling sustainability practices within Scenic Paint and Scenic Construction while doubling as a live student learning opportunity. Students engaged with:

- Material provenance and lifecycle
- Waste reduction through design choices
- Reconfiguration as a time-saving strategy
- Balancing creative intent with environmental accountability

> **Student Testimonial**
> *"I never realised it was possible to create an entire production using elements from a previous show. This experience has completely shifted the way I think creatively—now, whenever I see a set, I find myself imagining how it could be reimagined and repurposed for future productions."*

The dedicated SPAA scenic warehouse proved essential, enabling storage, cataloguing, and reuse. Next steps include piloting a digital tagging system to log scenic assets.

Next Steps and Future Commitment

Seussical laid strong groundwork for continuous improvement. Future priorities include:

- Advancing toward *Green Book Advanced* compliance
- Expanding the reuse database and digital tracking
- Embedding sustainability as a principle across **all production arts departments**
- Empowering students with sustainability literacy and leadership roles
- Strengthening SPAA's position as a regional leader in sustainable scenography

Conclusion

This case study demonstrates how SPAA balances artistic quality with sustainable production, supported by designer feedback, quantitative savings, and student learning outcomes. *Seussical* exemplifies how constraints can encourage innovation, collaboration, and cultural change.

Ultimately, SPAA aims not only to train skilled theatre-makers but also to cultivate practitioners who see sustainability as integral to artistry (Khalid & Darwish, 2023).

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