

## Learning by Design - 3D Printing in Primary Schools

### Expression of Interest

An exciting opportunity exists for Department of Education NT schools with a primary and/or middle enrolment to apply for the *'Integrating STEM in T-9 schools with 3D printing'* project for 2019. The project has an initial capacity for 30 schools in Semester 2. Schools will receive a 1 year subscription to "Makers Empire" which includes full site access to the 3D printing software, teacher's dashboard and high quality professional learning program provided by Makers Empire personnel.

### Background

The *'Integrating STEM in T-9 schools with 3D printing'* project focuses on providing professional learning for primary and middle school teachers in using 3D modelling and design technologies in integrated ways across the curriculum. Identified teachers will actively participate in professional learning that addresses:

- critical and creative thinking and the ICT general capabilities
- the Technologies learning area in the Australian Curriculum
- using the Makers Empire 3D modelling program
- understanding how to operate and use 3D printing within a learning context
- embedding learning technologies across the curriculum
- improving student involvement in STEM learning.

### Expectations and Commitments

#### School Leaders:

- Identify and provide release for 2 days for at least 2 participating classroom teachers or teams of teachers (for small schools where the release of 2 teachers would be problematic, site leaders may choose to submit a joint or partnership application).
- Support capacity building of classroom teachers through the facilitation of 'flow-on' professional learning within their sites.

#### Participating teachers:

- Attend 2 face to face professional learning days.
- Participate in professional learning communities.
- Design, trial and document a learning plan that uses 3D modelling and design aligned with TfEL
- Learning Design principles and the Australian Curriculum.
- Participate in data collection.
- Share their experiences with others.

#### Timeline overview:

- Term 2 - expression of interest
- Term 2 - participating schools notified
- Term 3 - Professional Learning Day 1 - week 2-3
- Term 3 - Professional Learning Day 2 - week 6/7
- Term 4 - Project - teach unit of work - week 1- 7
- Term 4 - Showcase day - week 8

## Expression of Interest Eligibility

Priority will be given to schools or partnerships that:

- have previously applied and been unsuccessful and/or
- have referenced STEM or Technologies as a priority, and/or
- are endeavouring to build the capacity of their primary teachers to embed learning technologies into the curriculum, and/or
- put in a joint application from multiple schools from within a partnership and/or
- interested in improving literacy or numeracy through the purposeful use of new and emerging technologies

1. Provide details and evidence of how the project will link to your current priorities.

2. Describe the structures that exist in your site or partnership to support capacity building of classroom teachers to support “flow on” professional learning?

3. Approvals and Endorsement:

School Principal

I understand the school is responsible for the costs incurred in releasing teachers for up to 2 days.

Name: \_\_\_\_\_

Date: \_\_\_\_\_ Signature .....

Identified teachers

Name: \_\_\_\_\_ Email address: \_\_\_\_\_

Name: \_\_\_\_\_ Email address: \_\_\_\_\_

Education Director Endorsement

Name: \_\_\_\_\_

Date: \_\_\_\_\_ Signature.....

**How to apply:**

Please return completed Expression of Interest forms by 6:30pm Tuesday 21 May 2019

1. download the application form here and fill out
2. submit electronic scanned copy via:

a. upload here on this webpage

[insert upload file]

or

b. send via email to: [info@makersempire.com](mailto:info@makersempire.com)

Further information can be obtained by contacting:

- Director of Learning Mandi Dimitriadis at [info@makersempire.com](mailto:info@makersempire.com) / (08) 7099 4030
- Department of Education NT Project Lead XXXXX / (08) XXXX XXXXX