How tinyML can redefine Computing Education

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www.tinyML.org
**TITLE: How tinyML can redefine Computing Education**

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<th><strong>Problem Statement:</strong></th>
<th><strong>tinyML solution:</strong></th>
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| Computing Education has an engagement, image and diversity problem (only 20% of the STEM cohort is female and only 35% study Computing at all)  
The highly practical and creative nature of the subject is not adequately realized in formal curricula  
Practical/Physical Computing using tinyML is a potential solution | Engaging, real world contextualized projects  
PBL/PC using tinyML with dev boards to create ‘artefacts’  
Combination of pedagogy, projects, toolchain and hardware to teach in a way that better serves the learner and engages more learners through practical STEM  
Combines the traditionally siloed Math/CS/D&T subject domains in a highly practical way |

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<th><strong>Impact:</strong></th>
<th><strong>Call to Action:</strong></th>
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| Improve engagement in STEM subjects  
Inspire the next generation of learners  
Modernize tools in education  
Engage more learners  
Improve D&I in STEM  
Feed the talent pipeline | Share tinyML projects in a format suitable for schools  
Run a tinyML PBL session in a local school  
Create tinyML training for teachers  
Develop tools to make tinyML more accessible to learners (think MakeCode or Scratch) |