

Dear Kayleigh,

Many thanks for providing me the opportunity to respond to the points made by the Cabinet Secretary, in her letter of 18 November 2025, in relation to my petition to Senedd.

Disappointingly, the Cabinet Secretary makes a number of **false claims** about my petition; and more disappointingly, **wholly inaccurate characterisations** of the Technocamps proposal for funding.

- The Cabinet Secretary writes: *“the petition claims [the STEM Learning UK project] is an exclusively English language programme”*. **This is blatantly false**. I ask the Petitions Committee to read over my petition and confirm for itself that it makes no such claim.
- The Cabinet Secretary writes: *“The petition claims only a small proportion of funding allocated is focussed on **STEM subjects**”*. **This is blatantly false**. What the petition **accurately** notes is:

*“Astonishingly, only 7% of the Curriculum support funding goes to the **Science and Technology AoLE** [Area of Learning and Experience]; the remaining **93% goes to [support] the 5 other AoLEs**. Providing so little support for the Science and Technology AoLE – and particularly computing and digital technology – is frightening and inexplicable”*.

I ask the Petitions Committee to read over my petition and confirm for itself that the Cabinet Secretary has overtly misrepresented what it says (in expanding the claim from referring specifically to just the **Science and Technology AoLE** to all of STEM).

Given the disregard for accuracy that the Cabinet Secretary exhibits with respect to the published content of my petition, I now turn my attention to the misrepresentation and inaccuracy in which the Cabinet Secretary characterises the unpublished Technocamps proposal for funding.

Note: I want to make absolutely clear what my petition calls for. Technocamps has been funded, annually, by the Department for Education and Skills (DfES) since 2014, but this DfES funding has now ceased. My petition calls on the Welsh Government to *“continue funding Technocamps to provide the support that schools and teachers across Wales rely on”*. The aim of my petition is **not** to have the Welsh Government reverse its decision to fund the STEM Learning project and instead fund the Technocamps project. However, to argue my case requires exposing the absurdity of the decision to award the Curriculum for Wales Grant Support Funding to STEM Learning rather than Technocamps, and the impact that this decision will have to the serious detriment of practitioners across Wales – highlighted by the sheer volume and comments of teachers backing this petition.

Ideally, the Petitions Committee would have access to the Technocamps proposal, as well as the STEM Learning proposal for the purposes of comparison, which sadly are not published for viewing by stakeholders. I have submitted a *Freedom of Information* request to the Welsh Government to be provided with the STEM Learning proposal, along with a breakdown of how their funding will be spent, in order to compare its outputs and expenditures with those of the Technocamps proposal. Unfortunately, this request remains unfulfilled.

The remainder of this document will: reflect on the content of the Technocamps proposal; demonstrate how this is misrepresented by the Cabinet Secretary; and conjecture that the STEM Learning proposal represents a far worse offering than the Technocamps proposal, providing extremely poor value-for-money, and will lead to a serious deterioration of opportunities for practitioners, particularly in remote regions of the country.

The Cabinet Secretary makes the point that the “*Curriculum for Wales Grant [Support] Programme*” focuses on **professional learning opportunities for practitioners**, which I fully acknowledge, and note **is at the heart of the national Technocamps initiative**. However, she then claims that the Technocamps proposal fails on this point, which is an incredible conclusion given the enormous evidence in the Proposal to the contrary. As I will show, the details provided in the Technocamps Proposal make it **very clear that the Technocamps proposal is, undeniably, focussed on professional learning opportunities for practitioners**; and that it represents an **extremely cost-effective** means to deliver **meaningful and effective professional learning opportunities** which are needed and in demand by practitioners across Wales.

According to the Technocamps proposal, the funding applied for was for the **salary of 15 people** working at six universities across Wales, **including 11 Computer Science education professionals**, who would develop **bilingual training resources for five new modules each year** to be **uploaded on Hwb**; and crucially **deliver this material in person to 900 teachers** through **2600 hours of training every year**, with a clear focus on **equity of provision** across all schools and regions across Wales. The Proposal includes a detailed budget which accounts for every penny spent on directly incurred costs.

In stark contrast, for slightly *more* money, according to all that is evident in the minimal published details, the STEM Learning proposal will seemingly only employ **two people** to develop and deliver curriculum support, all on-line apart from “*face-to-face sessions in priority areas or where hands-on learning is most effective*”. I would argue that the “*priority areas*” encompass the whole of Wales, but at the very least the most remote and isolated regions; I worry and suspect though that, given the lack of manpower employed by the STEM Learning project, the interpretation will be, at best, “*wherever is easiest to get to in order to demonstrate high engagement*”.

Immediately, I cannot see reason in choosing to fund a project to employ two people to provide professional learning opportunities predominantly through unspecified online resourcing instead of a cheaper project employing 15 people with extensive experience of practitioner training within the Welsh curriculum to provide professional learning opportunities directly, reaching 900 teachers across all regions of Wales through 2600 hours of bespoke in-person training each year.

The Cabinet Secretary makes the claim in her letter that STEM Learning UK is a not-for-profit company. Whatever this means formally, I invite the Petition Committee to reflect on the latest Financial Report filed by STEM Learning UK with Companies House which records a **net profit of £3.63 million for the year ending July 2024**. Given the lack of investment in staff to work on this project, I cannot help but wonder how much of the Welsh funding will add to their future recorded net profits. Technocamps, in contrast, is not a company in any sense, it is simply a term referring to a collaboration between all the universities in Wales; each penny of its funding is accounted for.

The Cabinet Secretary notes that “*STEM Learning UK has worked with partners in Wales for more than a decade*”. I know this to be true, as Technocamps has long supported *See Science* on very many occasions to recruit and train individuals across Wales onto STEM Learning’s Ambassador programme. I have nothing but praise for the STEM Ambassador programme, which encourages individuals to offer their time and resources – on a strictly voluntarily basis at no cost to STEM Learning UK or *See Science*. However, **voluntary STEM Ambassadors** offering occasional visits to schools as part of their company’s corporate social responsibility agenda **does not represent the basis of a national programme for professional learning opportunities for practitioners**.

The Cabinet Secretary notes that the STEM Learning programme “*comprises of 20 new professional learning courses*”. However, the examples that she lists are **pre-existing courses** that currently appear on the STEM Learning website, and that Technocamps has promoted to schools and teachers as options to consider exploring (though there is **little evidence** that any practitioners have taken up STEM Learning offerings due to its on-line nature). Technocamps offers very popular practitioner training on all of the same topics, and many others, including fully accredited extended courses. Technocamps also freely provides all of the resources for these on Hwb, the Welsh Government’s learning portal used by all schools and practitioners in Wales; there is **no evidence that STEM Learning will do the same** with their resources.

In support of the Technocamps model of professional learning opportunities provided by computer science experts located at all of the universities throughout Wales, the Technocamps Proposal refers to a 62-page report¹ published by NESTA which assessed the activities of 66 organisations that were in receipt of public funding to provide digital outreach activities in England, which gave **stark warning** regarding the motives and methodologies of such organisations. Reflecting on the availability of **easy targets**, the foreword of this report by Baroness Lane-Fox of Soho notes:

- *“The gaps are more striking than the successes, amplifying existing inequalities and hierarchies rather than empowering more people.”*
- *“Rural areas are being left behind.”*
- *“Far too many girls are not engaging, and the gap in confidence between boys and girls is widening.”*

The top key finding of the report is that *“Regions of England other than London and the Northwest are proportionally very undersupplied for the number of young people living there”*; and its top recommendation calls on organisations *“to focus their work on geographical areas that are less well provided for”*.

The vast majority of Wales is **at risk** of these warnings, with its sparsely populated communities distributed across a rugged geography with few fast roads, leaving very many schools and teachers isolated in terms of geography and, thus, subject support. Technocamps has won many awards for overcoming these challenges to **ensure equity** in provision, including a **UKRI STEM Inspiration Award** for **Outstanding Contribution to Widening Participation, Diversity and Inclusion in STEM**, and the **Informatics Europe Award** for **Best Practice in Education**.

The Cabinet Secretary refers to *“practitioner feedback asking for consistent, national available professional learning opportunities”*. **This is very true** – and **exactly what Technocamps has been pointing out to the Welsh Government** in its reports for its annual funding. These opportunities are **precisely what Technocamps has been providing**, with backlogs of requests that could never be fulfilled with the very basic levels of funding historically provided by the Welsh Government, leading to such feedback.

In one survey of teachers across Wales who had undertaken Technocamps professional development training (administered by an external evaluation company during 2024) of the 152 respondents, 76% rated the training as **“Excellent”** and 22% as **“Good”**, with 72% rating it as **“Essential”** and 25% as **“Important”**. Disappointingly, **84% indicated that they could identify no other organisation to which they could get support**; the 16% that could merely cited online resources such as bbc.co.uk/teach (which they learn about from Technocamps).

With minimal financial support, Technocamps has concentrated its efforts over the past ten years supporting the various projects and initiatives that were at the forefront of thinking within DfES, often involving the support of other worthwhile organisations. Every year has thrown up new examples of this.

- When the **Digital Competence Framework** was introduced in 2014, **Technocamps** targeted every secondary school with a grand ambition to deliver 3 hours of workshops in every one of them over an 18-month period, in order to embed the ethos and understanding of the Framework. By the end of the 18 months, Technocamps delivered an average of 10 hours of workshops in 97% of all Welsh secondary schools, and generated an extensive backlog of requests for further visits and support.
- When the new **Curriculum for Wales** introduced Computer Science as a full subject, **Technocamps** worked hard to ensure that all schools were able to embed the subject into their local curriculum – in particular, by providing extensive training for the teachers responsible for delivering the subject.

¹ Quinlan, O. (2015), “Young Digital Makers: Surveying attitudes and opportunities for digital creativity across the UK”. NESTA.

- When new **GCSE and A-level qualifications in Digital Technology** were introduced, **Technocamps** started a massive programme of teacher training, providing extensive professional development opportunities to over 200 teachers who struggled with the transition from the existing ICT curriculum to that for the Digital Technology qualifications.
- When the **CyberFirst Wales** programme was launched, its proposal for funding (which name-checked Technocamps 12 times) noted that delivery would be based – and rely wholly – on **Technocamps**, exploiting Technocamps' teacher network, and with delivery coordinated by the Technocamps Regional Coordinators at the various universities across Wales.
- When the Welsh Government provided their backing for the **Minecraft Education Initiative**, **Technocamps** established 5 *Minecraft Learning Centres* across the University hubs; and developed and delivered a series of 9-week Minecraft training courses for practitioners.
- When the Welsh Government encouraged schools to engage with the **BBC micro:bit NextGen** programme, **Technocamps** developed workshops which embedded the use of these devices for each of the six AoLEs of the Welsh Curriculum, and provided full-day training workshops in all regions of Wales which was attended by almost 200 practitioners.

What is clear from this, is that **Technocamps** has always offered itself as the **vehicle for delivering the initiatives proposed or promoted by the Welsh Government**, concentrating on ensuring that all schools and **all practitioners across Wales have equal access** to the professional learning opportunities that they require. Drawing on the expertise of the Welsh universities, Technocamps is always able and eager to respond in a reactive manner to develop and deliver training sessions and workshops that align with changing priorities within DfES.

The obvious question then is: ***What motivates the Cabinet Secretary to so wrongfully mis-characterise the Technocamps proposal?***

Whilst much of Technocamps professional learning opportunities is delivered outside of the classroom, there are well-understood reasons for providing practitioner training within the classroom environment. It cannot be stressed enough how much appreciation the practitioners express in receiving training in-situ, in the classroom, with the young learners involved. Importantly – though not for pedagogical reasons – practitioners are deeply troubled by the expectation that they devote their evenings and weekends undertaking essential training through on-line resources outside of class time; many simply won't, and most that do report it being difficult and ineffective.

Pedagogically, involving the young learners in bespoke workshops tailored to provide practitioners with essential training allows the practitioners to understand and be involved in the delivery of the topics they themselves are learning. This also provides them with the confidence that the training is developed and provided in a way that translates directly into practice in the classroom.

The Technocamps Proposal notes that, in the course of training **900 teachers** each year, **30,000 young learners** will benefit by being involved in these training sessions each year. This provides **huge added value** to the programme of practitioner development, as it remains ever important to encourage young people – in particular girls – to engage with digital education. There is no end of evidence that this is important, and endless feedback from teachers noting the positive effect on the young people in their classrooms from being involved in these professional development training workshops.

The fact that 30,000 young people benefit directly in the course of providing training to their 900 teachers must **not** detract from the fact that **this activity is absolutely focused on providing professional learning opportunities to practitioners**; though these opportunities involve a great deal of direct delivery to learners, **learner delivery is not the focus**.