

## Digital Centre for Excellence: Newbattle Community High School

## Report by Dr Grace Vickers, Head of Education

## 1 Purpose of Report

- 1.1 The purpose of this report is to provide Council with an overview of the proposed development of Newbattle Community High School as a Digital Centre for Excellence.
- 1.2 Approval is being sought to establish Newbattle as the first Centre for Excellence and in doing so note the funding requirement for the technical infrastructure and staffing necessary to develop the Centre of Excellence.
- 1.3 At this time approval is sought for funding to allow the appointment of a Centre Coordinator to be in place by May 2017.

# 2 Background

- 2.1 The location of Midlothian's first Centre of Excellence at Newbattle addresses the challenges faced by one of the region's most disadvantaged communities. The provision of this sector leading facility will:
  - Help to tackle social and economic inequalities.
  - Build capacity within the local community and beyond.
  - Develop skills, knowledge and ambition.
  - Reduce the poverty-based attainment gap.
  - Promote digital inclusion.
  - Improve occupational mobility of labour.
  - Improve outcomes and positive destinations for young people.
- 2.2 Centres of Excellence are a key part of Midlothian's vision of creating a world class education for children and young people. Based primarily within secondary schools, Centres of Excellence would offer opportunities for deeper learning through an enhanced curriculum, specialist teaching, dedicated resources and high quality vocational experiences.
- 2.3 The Centres of Excellence proposal both integrates and augments Scottish Government's Developing Young Workforce programme, which highlights the importance of all young people developing and using the skills and abilities necessary to become an active part of the labour force and contributing to the economic growth of their communities. Centres of Excellence will enable more young people to progress directly into employment or into a relevant career pathway where vocational skills can be further developed within further and higher education, or through apprenticeships.

- 2.4 Centres of Excellence will offer young people (and adult learners) the opportunity to experience high quality learning and teaching within a framework that blends deep and immersive academic learning with the development of relevant vocational skills. Students will have access to dedicated teaching areas, as well as state-of-the-art technology and equipment. They will have the opportunity to work closely with local employers, universities and colleges to ensure deep learning and specialisation through programmes of mentoring, work placements and internships.
- 2.5 A Centre of Excellence would also be a regional hub, so that students from other Midlothian schools could access specialist teaching and resources through digital technologies, such as video links and online learning. The availability of high quality digital and online learning means that students are able to access specialist curricular provision no matter where they live within Midlothian.
- 2.6 It is important to recognise that the Centre of Excellence model requires a whole school approach; ie it is not an independent specialist unit which operates as a separate department or provision within the building. Although there are staff who are able to provide opportunities for specialist study and vocational training, the vision is for the whole school to be a Centre for Excellence so that the skills and knowledge permeate and enhance the broad general education, as well as the senior phase.
- 2.7 It is our vision that, over time, Centres of Excellence will be established across Midlothian in a range of specialist areas covering, for example:
  - Digital Industries
  - Science
  - Technology
  - Health and Sport
  - Engineering
  - Creative Industries
  - Languages

The first phase of this strategy is the establishment of a Digital Centre of Excellence at Newbattle Community High School.

#### 3 Newbattle Centre of Excellence

- 3.1 The first pilot phase of the project proposes the creation of a Centre of Excellence to support the growth of digital industries across the region. The Centre would be based at Newbattle Community High School, which is located in an area of significant socio-economic disadvantage. The school, which is being redeveloped with a new building opening in March 2018, will offer students opportunities to specialise in disciplines related to digital industries, including:
  - Film and video production
  - Software design and engineering
  - Programming and coding
  - Games development and publishing
  - Digital engineering (eg, CAD)
  - Sound/audio engineering and music production
  - Business administration and e-commerce
  - FinTec (financial technologies)

- Data management and analytics
- HealthTech
- Telecommunications and networking
- 3.2 Within the senior phase (S4-6) students will have opportunities for deeper learning and specialisation through an enhanced curriculum, specialist teaching and dedicated resources. They would have access to dedicated teaching areas, as well as state-of-the-art technology and equipment. Students would have the opportunity to work closely with local employers, universities and colleges to ensure deep learning and specialisation through programmes of mentoring, work placements and internships.

It is intended that Newbattle will become established as a Digital Centre of Excellence, enabling students to develop the skills and knowledge required to pursue vocational education pathways or enter employment in the region's rapidly growing digital sector.

- 3.3 In order to establish Newbattle as a Digital Centre of Excellence, the building will be equipped to meet the technical specification required to deliver the enhanced curriculum, including the infrastructure associated with broadband, wi-fi and cabling, as well as the technologies required for learning and teaching the enhanced curriculum.
- 3.4 There will also be a requirement for additional staffing resources over and above that currently allocated to the School in accordance with the Devolved School Management (DSM) scheme. The additional staffing will be required to develop and deliver the enhanced curriculum at Newbattle, particularly in the initial period until the enhanced curriculum is embedded across the whole school. It is expected in the initial phase that this would comprise a Centre Co-ordinator, additional academic staffing (2-3 teachers) and technical support. (This is set out in Section 5: Funding Requirements).
- 3.5 Digital Industries: Labour Market Analysis

Across the UK, some 1.46 million people are currently employed in the digital industries, with job growth in the sector predicted to outperform all other occupation categories by the end of the decade.

- 3.6 The Digital sector is considered to be a major driver of the UK economy over the next 10 years and forecasts all predict the continuation of the demand for high level skills in the sector. Digital sector workers are also amongst the most highly qualified members of the UK workforce.
- 3.7 Edinburgh was highlighted as a digital industry hotspot in the 2015 Tech Nation Report, which provided a detailed analysis of Britain's digital technology clusters. The Report found that within Edinburgh and its surrounding area, the number of 'digital companies' has grown by a third during the past 3 years, and supports nearly 20,000 jobs.
- 3.8 The region has particular strengths in software development, financial technology and education technology. In recent years a number of local incubator businesses have emerged as sector-leading commercial enterprises including *SkyScanner*, *FanDuel*, *Craneware*, *Codebase* and *Cloudsoft*. Key computing science strengths in areas such as machine learning, natural language processing and cloud architecture in the Edinburgh universities have helped create a developer talent pool which has fed the growth of such companies, as well as the wider business community.

- 3.9 Employers, however, raise serious concerns about the future supply of skilled and talented people that will be needed to fill the ever growing number of roles created by these emerging technologies. Within the Edinburgh City region, talent production and talent migration have emerged as barriers to growth, despite Edinburgh University being the most highly regarded institution in the UK for undergraduate Computing Science courses.
- 3.10 Sourcing the required numbers of suitably skilled staff to capitalise on the opportunities that these technologies offer is a key challenge for employers in the sector, which if not addressed will seriously compromise future business growth potential for the City region. There is evidence suggests that digital skills gaps are affecting the ability of organisations to grow and develop as quickly as they might be able to, should they be able to source skills more easily.

## 4 Project Outcomes

- 4.1 It is expected that the Digital Centre for Excellence will deliver the following outputs:
  - 800 students trained in relevant specialisms over 5 years and beyond
  - 650 students progressing into employment or higher level employment over 5 years and beyond
- 4.2 The project will deliver additional outcomes more students obtaining relevant skills enabling them to access higher skilled jobs or progress into higher education with a career pathway towards employment. It will respond to the current and future recruitment and skills needs of employers particularly those employers who experience recruitment challenges in the digital sector.

# 5 Funding Requirements

5.1 A bid for funding of £1.3m to establish a Centre of Excellence at Newbattle Community High School is included as part of Edinburgh and South East Scotland City Region (ESESCR) submission and this is included in the Skills and Innovation bid (City Deal Project G). Discussions on the content and timing for the City Deal bid are ongoing with the earliest possible award being secured shortly after the UK Government's March 2017 budget.

The Council remains optimistic that The ESESCR will secure a City Deal and that Centres of Excellence will for part of that. However given that the new Newbattle is scheduled for completion in March 2018 it is necessary now to secure initial resources to appoint the Centre of Excellence Co-ordinator, in advance of a City Deal, to allow the school to be able to be established as a Digital Centre of Excellence when the new building opens.

Overall funding of £1.3m will be required to establish a Digital Centre of Excellence at Newbattle for the initial 3-year period. Thereafter, the ongoing revenue costs will be subsumed within a business as usual model, potentially funded through a combination of school DSM, Government grant and sponsorship from commercial partners and higher education.

The projected costs include both initial capital set up costs and ongoing revenue elements which will be used to:

- a) Provide dedicated equipment and resources;
- b) Establish a Centre of Excellence Co-ordinator, additional academic staffing and technical support for a period of 3 years, together with resource and staff development.

#### **Anticipated Capital Expenditure**

Digital Film and Video Production	£ 80k
Sound and Radio Production	£ 40k
Coding and Gaming Laboratories	£ 40k
Digital Engineering, CAD	£ 50k
Business Applications; e-commerce	£ 20k
Networking and Infrastructure	£ 80k
Computing technology and multimedia	£200k
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Total Capital Expenditure £510k

These assets are in addition to the mainstream digital asset requirements for the new school which are currently being evaluated. Proposals for both the mainstream assets and those set out above and will need to be brought forward for approval in the next General Service Capital plan report scheduled for June 2017 Council to allow procurement and installation by March 2018.

# <u>Initial Revenue Expenditure</u> (3 years)

Centre co-ordinator	£170k
2 x Technical Support officers	£180k
2 Apprenticeships	£ 70k
*Enhanced academic staffing	£280k
*Other revenue support	£100k
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Total Revenue Expenditure £800k

- \* Enhanced academic staffing accounts for 2-3 teachers.
- \* Other revenue support includes a flexible travel fund to enable student travel, resource development, staff training, enhanced curriculum, consumables.
- 5.2 At this point, and in advance of any City Deal funding award, funding of £170k is sought to allow the appointment of the Centre of Excellence Coordinator.

#### 6 Project Timeline

•	Appointment of Centre of Excellence Co-ordinator
June 2017	Consideration of Technical Infrastructure and remainder of staffing
Dec 2017	Appointment of academic and support staff
Feb 2018	Completion of building adaptations/technology
Mar 2018	Opening of Digital Centre of Excellence

# 7 Items to be Progressed

## 7.1 Appointment of Centre Co-ordinator

The Appointment of a Centre Co-ordinator is integral to the successful establishment of the Centre of Excellence at Newbattle. The post-holder is expected to be part of the school senior management team and the strategic leadership requirements would justify a salary at depute head teacher level (subject to job sizing). In order to have the Co-ordinator appointed and in place in well in advance of the centre opening, a job specification must be drawn up and the post advertised by March 2017.

#### 7.2 Infrastructure

Work is underway to ensure that the Newbattle building infrastructure will meet the needs of the enhanced curriculum and the vision for learning and teaching. A scoping exercise will be progressed to assess the building's capacity in terms of broadband delivery, wi-fi capability, cabling/electrical etc with any changes and enhancements agreed and implemented during the build.

In view of the timeline for this work, Midlothian's Education Officer for Learning Technology will be deployed 2 days per week until June 2017 to support the successful delivery of the Learning Technology required for the Newbattle Centre of Excellence reporting progress directly to the Newbattle Project Board This will require 0.4FTE staffing backfill, funded from existing budgets, in the Learning Technology team for the duration of this deployment.

#### 7.3 Communication and Awareness-Raising

The Headteacher has outlined the proposal to Newbattle staff, who have responded positively. The Parent Council has also responded positively. Midlothian Council needs to embark on a wider programme of awareness-raising about the proposed Centre of Excellence – the rationale, the aims, timelines, expectations and projected outcomes.

#### 7.4 Collaboration and Partnership

The success of the Centre for Excellence depends on there being strong and effective collaboration between the Council and key partners, including the University of Edinburgh and the major technology companies in the region, such as Skyscanner, Fanduel and Codebase. This is being progressed at a senior level within the Council with work ongoing with The University of Edinburgh aimed at developing a memorandum of understanding in this respect. Developing collaboration and partnership with the FE sector and business will also be a significant component of the work of the Centre Co-ordinator.

The current Headteacher of Newbattle, Colin Taylor, has communicated his decision to retire in June 2017. It is proposed that between August 2017 and Easter 2018, Mr Taylor continues to work one day per week on supporting the development of the Newbattle learning community in preparation for the opening of the Centre.

## 8 Report Implications

#### 8.1 Resource

A bid for funding of £1.3m for a Centre of Excellence at Newbattle has been made as part of Edinburgh and South East Scotland City Region (ESESCR) City Deal submission and this is included in the Skills and Innovation bid (City Deal Project G). The outcome of the submission is likely to be known by Spring 2017. £12 million has been earmarked in the Capital Fund to provide for the Council's capital contribution toward City Deal projects.

At this point, in advance of Council formally approving its participation in a City Deal and securing City Deal funding Council is asked to approve the resources necessary to progress with the appointment of the Centre of Excellence Coordinator post. This will require the utilisation of an additional £56,000 of reserves in 2017/18.

A further report, seeking funding for the mainstream digital assets for the new school together with the additional items required for the Centre of Excellence will need to be presented to Council in June 2017. This report will also address the funding required for the remainder of the revenue costs required for the school to operate as a Digital Centre of Excellence, reflecting the impact of City Deal funding.

If City Deal funding is not secured the capital expenditure, estimated at £510,000 for the Centre of Excellence could alternatively be met from the resource set aside for City Deal projects in the Capital Fund. However further consideration would need to be given to how best to fund the remainder of the revenue costs for the initial three year period estimated at £744,000.

#### 8.2 Risk

The approach set out in this paper negates the risk of having to delay the establishment of the Centre of Excellence until City Deal funding is secured with direct funding being allocated through Council budgets to allow appointment of the centre coordinator. Without the remainder of the required funding to meet the revenue and capital costs, there is a significant risk that the Centre cannot be established. The remainder of the funding requirements will be set out in the report planned for Council in June 2017 reflecting the position with the City Deal bid.

# 8.3 Single Midlothian Plan and Business Transformation

Th	emes addressed in this report:
	Community safety
	Adult health, care and housing
$\boxtimes$	Getting it right for every Midlothian child
$\boxtimes$	Improving opportunities in Midlothian
	Sustainable growth
$\boxtimes$	Business transformation and Best Value
	None of the above

This work is a part of the Single Midlothian Plan's key priority of Reducing the Gap in Learning Outcomes.

#### 8.4 Impact on Performance and Outcomes

The provision of high quality secondary schools suitable for the current and future delivery of education, supports work towards the Single Midlothian Plan's key priority of reducing the gap in learning outcomes and presents every child with the opportunity to attend the school which serves their community. Establishing Centres of Excellence in Midlothian will bring about improvement in pupil attainment and achievement, and hence positive destinations, it also contributes to reducing gaps in economic circumstances and health.

## 8.5 Adopting a Preventative Approach

Reducing the gap in learning outcomes is a preventative contribution to work towards reducing gaps in economic circumstances and health.

#### 8.6 Involving Communities and Other Stakeholders

The pre consultation process has included some consultation with parents, staff and community representatives. Further consultation and awareness-raising is required with the community and other stakeholders.

## 8.7 Ensuring Equalities

Not applicable at this stage.

#### 8.8 Supporting Sustainable Development

The proposals take into account the need to deliver fit for purpose, sustainable (for both now and the future) secondary schools through the design and use of appropriate and sustainable facilities and infrastructure.

#### 8.9 IT Issues

The recommendations in this report address the IT requirements to ensure the technology will be in place to operate as a centre of excellence. The core digital asset requirements for the new school are currently being assessed and will be presented to Council in June 2017. Midlothian's Education Officer for Learning Technology will be deployed 2 days per week until June 2017, to support the successful delivery of the Learning Technology required for the Newbattle Centre of Excellence and reporting progress to the Newbattle Project Board.

#### 9 Recommendations

It is recommended that Council:

- a) Note the nature of the proposal and the rationale for the Centres of Excellence model.
- b) Approve the establishment of a Digital Centre of Excellence at Newbattle.
- c) Approve the appointment of a Centre co-ordinator and the allocation of £56,000 from reserves in 2017/18 to fund the post.
- d) Note that a further report, seeking funding for the mainstream digital assets for the new school, together with the additional items required for the Centre of Excellence, will be presented to Council in June 2017. This report will also address the funding required for the remainder of the revenue costs required for

- the school to operate as a Digital Centre of Excellence, reflecting the impact of City Deal funding.
- e) Note the ongoing work of the Council in developing key partnerships with the University of Edinburgh and commercial partners from digital industries.
- f) Note that the current Headteacher of Newbattle will retire in June 2017 but will continue to work one day per week on supporting the development of the Newbattle learning community in preparation for the opening of the Centre.
- g) Note the proposal to extend the Centres of Excellence model to other Midlothian secondary schools.

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