



## ADMINISTRATIVE REPORT

Report Date: September 18, 2018  
Contact: Paul Mochrie  
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RTS No.: 12774  
VanRIMS No.: 08-2000-20  
Meeting Date: September 18, 2018

TO: Vancouver City Council  
FROM: City Manager  
SUBJECT: Innovation Fund Grant – Curiosity Commons Program

### **RECOMMENDATION**

- A. THAT Council approve a grant of \$175,000 to the Vancouver School Board to support implementation of the Curiosity Commons Program; a three-year pilot program aimed at fostering STEAM (Science, Technology, Engineering, Art and Design and Mathematics) education in select Vancouver elementary schools. The source of funding for this grant is the City's Innovation Fund and provision of the grant is conditional on confirmation of sufficient funding from other public and/or private sector sources to support the pilot
- B. THAT pursuant to section 206 (1) (j) of the *Vancouver Charter*, Council deems the organization named in recommendation A to be contributing to the welfare of the City.
- C. THAT no legal rights or obligations are created by the approval of Recommendation A above unless and until a Grant Agreement (or letter of agreement) is executed and delivered by the City and Vancouver School Board;
- D. THAT the Director of Legal Services be authorized to execute a Grant Agreement, on behalf of the City.

Approval of Recommendation A requires 2/3 affirmative votes of all Council members per *Vancouver Charter S. 206(1)*.

## **REPORT SUMMARY**

This report provides background on an innovative STEAM educational program proposed by the Vancouver School Board and describes the alignment of the program with City of Vancouver goals and the parameters for allocation of Innovation Fund.

## **COUNCIL AUTHORITY/PREVIOUS DECISIONS**

An overview of the guidelines for allocation of the Innovation Fund and the specific alignment of this project is attached as Appendix A.

## **CITY MANAGER'S/GENERAL MANAGER'S COMMENTS**

The City Manager recommends approval of the foregoing.

## **REPORT**

### **Background/Context**

Given the rapid evolution in technology and associated transformation of the Canadian economy, STEAM literacy is increasingly essential to our collective economic success, as well as the employment prospects for young people. A high proportion of the employment opportunities available to students entering our elementary schools today will require STEAM literacy. Even today, access to talent is a significant constraint on the growth of BC's high-tech sectors.

Vancouver School Board (VSB) is seeking a partnership with the City of Vancouver, Province of British Columbia, Science World and technology companies to implement an innovative pilot project aimed at fostering digital and STEAM literacy for elementary students in grades 4 to 7. The pilot will launch initially in schools supporting vulnerable student populations, as identified by VSB based on criteria including the number of indigenous students and present of English language learners. While STEAM education is critical for all students, disadvantaged students face the biggest risk of being left behind in this regard.

The project has two primary objectives: 1) creation of engaging, hands-on, digital learning spaces, and; 2) focussed professional development for teachers and mentors.

The program will provide funding for technology resources, including computer hardware, robotics, 3D printers and programmable microcontrollers, as well as flexible classroom furniture to accommodate easy classroom configuration and to enable students to move as they learn. Total funding for technology, furniture, equipment and supplies is contemplated up to a maximum of \$50,000 per school.

The second core objective for the program is to deliver professional development for teachers and mentors who will be interacting with students through the learning process. VSB expects to contract with Science World to provide intensive workshops

for a small group of teachers and an administrator from each of the participating schools. In addition, district mentor teachers and volunteer technology professionals will be available to support core teachers with the design and implementation of learning activities in the classroom. VSB has estimated costs associated with professional development at \$92,000 per year.

VSB is seeking to implement the pilot project in at least 10 schools in the first year, expanding to a total of at least 30 schools over a three year term. 30 schools represents approximately one-third of the VSB's elementary student population.

Evaluation of the pilot will be conducted in collaboration with the UBC-based Human Early Learning Partnership; an interdisciplinary research network specializing in child development. Key performance indicators will be developed and monitored annually to assess the effectiveness of the pilot.

The proposed funding target for the 3-year pilot is \$2.1M.

### ***Strategic Analysis***

As an opportunity to leverage potential contributions the Province of British Columbia and the private sector, the proposed grant is consistent with the general intent of the Innovation Fund. Additionally, there is strong alignment between the aim of the Curiosity Commons program and strategic objectives that the City of Vancouver is seeking to accomplish.

Vancouver's Digital Strategy acknowledges our increasing reliance on technology to connect, create, learn, earn, and play, as well as the barriers that poverty creates for access to that technology. The 'digital divide' between low- and high-income residents is called out in the Digital Strategy as a key challenge and a priority for attention. Addressing this divide is a particular concern in Vancouver where approximately 1 in 4 children are from low income families.

The Curiosity Commons program also connects with several Healthy City goals. The Healthy City Strategy acknowledges the importance of providing children with a good start in life, and notes that learning opportunities are key building blocks to the overall health, prosperity, and resilience of all residents. The Healthy City Strategy also aims to foster social inclusion and strong social connections, as well as ensure residents have the ability to make their financial ends meet. The program will prepare children, with a focus on Indigenous and recently-arrived immigrants, for full participation in the labour market of the future.

The focus on this particular age group is also significant. Middle childhood is an important period where children experience significant cognitive, social, and emotional changes that establish their identity and set the stage for development in adolescence and adulthood. (Human Early Learning Partnership, UBC). The proposal provides a key opportunity to provide experiences, to harness and identify children's interests, skills and potential that can be built upon at secondary and post-secondary institutions. In fact, the opportunity to increase rates for Indigenous students in participating schools aligned directly with the City's reconciliation efforts.

***Implications/Related Issues/Risk (if applicable)******Financial***

The program funding target to support investments in technology and equipment for participating schools and professional development is approximately \$700,000 per year for a total of \$2.1M over the three year pilot. The proposed contribution by the City of Vancouver, to be provided by way of a grant to the VSB, is \$175,000.

It is expected that additional funding will be committed by the Province of British Columbia and the private sector to enable the pilot to proceed; the City's grant is conditional on VSB realizing such commitments from other funders.

\$175,000 represents the full amount of the unallocated funds remaining in the Innovation Fund for 2018. Additional Innovation Fund allocations to continue the City's support in future years would be subject to available budget and Council approval in those years.

***CONCLUSION***

The Curiosity Commons program as proposed by the VSB presents an opportunity to advance a number of City objectives as set out in the Digital, Healthy City and Economic Development Strategy, as well as the City of Reconciliation commitment. On that basis, and the anticipated contributions from other public and private funders, staff are recommending a \$175,000 grant to the VSB as consistent with the purpose and guidelines for allocation of the Innovation Fund.

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**Project Alignment to Innovation Fund Guidelines**

Innovation Fund Guidelines	Project Alignment
<p>Aligns with Council priorities</p> <p>Supports transformation and innovation in meeting City goals</p>	<ul style="list-style-type: none"> <li>• Digital Strategy – directly addresses the digital divide for disadvantage students.</li> <li>• Health City Strategy – aims to ensure students have the tools required to fully participate and make ends meet in our evolving economy.</li> <li>• City of Reconciliation – schools with a high proportion of Indigenous students will be prioritized for participation in the program.</li> <li>• Vancouver Economic Development Strategy – focus on developing talent for tech sectors.</li> </ul>
<p>Target leverage of 3:1 (minimum 1:1) third party investment</p>	<ul style="list-style-type: none"> <li>• The proposed grant is expected to leverage approximately \$1.325M in contributions from other public and private funders.</li> </ul>
<p>One-time opportunity</p>	<ul style="list-style-type: none"> <li>• The Curiosity Commons proposal has been developed as a three-year pilot program.</li> </ul>
<p>Demonstrates clear outcomes and transformation toward City of Vancouver goals</p>	<ul style="list-style-type: none"> <li>• The pilot program will be evaluated in collaboration with the Human Early Learning Partnership at UBC, including the development and annual monitoring of key performance indicators.</li> </ul>