## Science Centres and the Development of Future Science Professionals



#### John H. Falk Institute for Learning Innovation Oregon State University

Science centres claim to be committed to the goal of increasing the number of **Science Engaged** individuals in their community, including professionals and hobbyists.

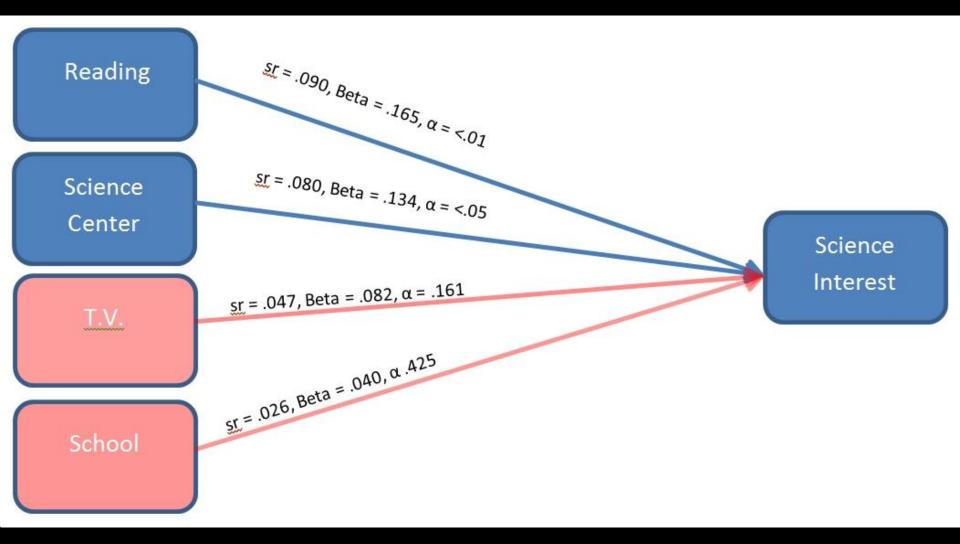
Surprisingly few efforts specifically focus on this goal and data confirm that this is currently a major limitation of science centres' impact on their communities.

## MISCES – Multi-Institutional Science Center Effects Study



(Falk, Pattison, Meier, Bibas & Livingston, in press)

#### Adult Multiple Regression of <u>Past</u> Science Experiences on <u>Current</u> Science Interest



## ISCIS – International Science Center Impact Study



(Falk, Dierking, L.D., Swanger, L., Staus, N., Back, M., Barriault, C., Catalao, C., Chambers, C., Chew, L.-L., Dahl, S.A., Falla, S., Gorecki, B., Lau, T.C., Lloyd, A., Martin, J., Santer, J., Singer, S., Solli, A., Trepanier, G., Tyystjärvi, K. & Verheyden, P., 2016)

## Relationship between number of Adult previous visits and dependent scales

	Never Visited (53%)	1-2 Visits (17%)	3-10 Visits (24%)	11+ Visits (7%%)	p-value	Eta
Knowledge & Understanding	2.32	2.56	2.58	2.65	< .001	.23
Interest & Curiosity	0.05	0.16	0.25	0.33	< .001	.14
Out-of-School Engagement	3.77	4.04	4.23	4.41	< .001	.19
Science-Related Vocations	3.37	3.30	3.45	4.02	.319	.03
Science Confidence		3.77	3.83	4.10	< .001	.10

# Who Does a Good Job of Supporting Career Pathways?









### **Science Centres Need to Proactively:**



- *Stimulate Interest* in science, but also must:
- <u>Identify Talent</u> and proactively cultivate the interests and abilities of those with talent
- <u>Support Mastery</u> move beyond "One and Done" approach; need to create opportunities for development at every stage in process