IAD PTAS Report
'Learning by developing in a 'living lab': development of practice and knowledge for novel interdisciplinary learning'

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IAD generously awarded the Edinburgh Living £15000 to conduct teaching-led research involving the living lab approach of "learning by developing" (LbD) project team with inter-disciplinary teams (of staff and students) over the course of 18 months. The project made the following proposition:

> *"We propose developing knowledge and practice in a novel learning process and environment, focused on Learning by Development, within the context of an Edinburgh Living Lab."*

The project team engaged in a number of activities, highlights include:

- A teaching assistant was recruited to shadow delivery of teaching associated with Design for Informatics (D4I; DESI11027), to develop insights regarding transferrable structures and approaches from studio based courses, deemed useful for other course organisers across UoE wishing to do similar types of work
- Data, Design and Society (DDS) is an undergraduate (Level8) course which was designed and developed using the framework constructed in the shadowing of D4I.
- One difference in approach between D4I and DDS was that DDS aimed to provide datasets to students with which to work, whereas D4I, as a PG offering, fostered the creation of independent student datasets. In order to achieve this, DDS was instrumental in working with colleagues in EDINA and establishing the use of JupyterHub to facilitate the use of Python and establishing common datasets to foster data literacy in the course
- Two papers presented at Dealing with Data (2015) regarding interdisciplinary teaching, and perspectives of students managing open data (both qualitative and quantitative)
- A research assistant (RA) was recruited to work with Edinburgh Living Lab to construct a plan for dissemination of Living Lab principles, community engagement, and interdisciplinary teaching more widely. The RA conducted a series of workshops across the University in AY 2015/16 which brought together best practices in these areas and highlighted areas for future development and collaboration between academic partners
- In spring 2016, ELL delivered an open workshop with Carl Gombrich (Programme Director, BASc Arts and Sciences – UCL) on constructing,

developing and managing interdisciplinary teaching and research programmes in the University.
- The RA worked closely with colleagues in Social Responsibility and Sustainability (SRS) to consolidate and develop a Living Lab framework for teaching, which is now supported and distributed by SRS centrally
- Paper was written and a poster presented at the Interdisciplinary Learning and Teaching Conference at the Open University.

Beyond the grant, The Edinburgh Living Lab continues to co-operate with the City of Edinburgh Council, and is now in discussions with various partners regarding interdisciplinary teaching; learning by developing; living lab approaches across various Edinburgh Projects including the City Deal (Klein, Magill) & EFI (Verhoeven; Stewart).

Output Summary:
Data Design and Society (DDS) -- Open L8 Undergraduate course developed from principals derived from Design for Informatics (D4I; DESI11027); delivered Sem1 2016/17 -- https://edinburghlivinglab.github.io/dds/

IAD Insights paper – Case study of Living Labs as courses; Design for Informatics
http://www.docs.hss.ed.ac.uk/iad/Learning_teaching/Academic_teaching/Resources/Practice_sharing/Living_Lab_Design_Informatics_Insight_paper.pdf

Internal guidance on establishing a Living Lab in the University of Edinburgh (with SRS) -- https://www.ed.ac.uk/about/sustainability/themes/research-teaching/the-university-as-a-living-lab

Dealing with Data (2015) -- http://datablog.is.ed.ac.uk/2015/08/07/dealing-with-data-2015-programme/

Paper/Poster Presentation -- Interdisciplinary Learning and Teaching: Frameworks and Practice, 6 April 2017, Milton Keynes

Additional Resources –
https://media.ed.ac.uk/channel/Edinburgh%2BLiving%2BLab/80423581