

# THE EVOLUTION OF THE INFORMATION PROFESSIONAL: THOUGHTS ON INNOVATION IN “LIBRARIANSHIP” AND PRACTICAL SOLUTIONS FOR FUTURE CANDIDATES FROM IVA

*The original organiser behind DST4L – Chris Erdmann – believes that librarians possess basic skills that, in combination with stronger IT skills and analytical skills, could become an extremely powerful data scientist librarian profile. How does that reflect in the minds of a student and teacher from the Royal School of Library and Information Science (IVA)?*

Data management services are becoming increasingly prominent for library service developments in the future. This was the motivation behind the conference Data Scientist Training for Librarians (DST4L). Experts from CERN, Harvard-Smithsonian, eLife, and GitHub emphasized the need for librarians (and information specialists) to rethink their core objective, as the dividing walls between computer science and library science are getting thinner. Needless to say, this made us think about the future prospects for IVA candidates and reflect on the extent to which they are prepared for their transition from student to librarian. Basically, do IVA students need to skill up?

**Reflection 1:** Libraries and knowledge centres are gravitating towards librarians with knowledge of digital methods and archiving, software applications, teaching, and innovations; with a special emphasis on social media.

**Proposal 1:** We are not proposing that students at IVA begin classes in hardware and software development. Instead we recommend an increased collaboration with computer scientists which may:

1. Increase knowledge about the market advantages librarians can gain from *basic* programming skills.
2. Result in skill sets where students can work together and learn. Likewise, teachers have opportunities to develop interdisciplinary courses, lectures and cross-disciplinary assignments.

3. Increase awareness of the benefits and potentials of diverse software for the communication of different scientific and cultural disciplines.

Core knowledge of system and user behaviour continues to be a strong competence of students from IVA but developing our knowledge through hands-on experience of different data analysis tools will further strengthen these skills and ultimately create stronger connections with users.

**Reflection 2:** Employers and managers participating in DST4L complained of weak communication, practical and presentation skills in new graduates; expecting more multi-dimensional and market-oriented skills and interest in leadership roles.

**Proposal 2:** IVA has recognized the importance of continually readdressing what skills students need to succeed in the job market. IVA's educational strategy 2015-2017 critically considers the profile of the IVA education in fully meeting the needs of graduates and their potential employers. This approach to education pressures both IVA *and* the students to improve their performance. Employability is the very first of seven priority areas described in the strategy, particularly:

1. In the private market, which is predicted to show the greatest growth in employment of IVA candidates.
2. Incorporating the needs of the market and employers clearly in individual courses.
3. Clearly communicating qualifications employers expect in new candidates.
4. Focusing the education not simply on finishing quickly but ensuring that students are educated to succeed on the job market.



*Will IVA be able to create powerful data scientist librarian profiles?*

It is expected that 65% of the jobs of the future do not exist today. Therefore it is vital to consider not just the technical aspects of an education but the social skills that will equip librarians to adapt to the needs of the marketplace, which importantly means IVA has to nurture students' curiosity and drive to indulge in continuous learning, which is essential to meet the complex information problems that need solving.

**Reflection 3:** The defining message from DST4L was the necessity of remaining in touch with the community that the librarian serves, likewise the community IVA educates candidates to serve. This idea was echoed by Ian Mulvaney (SP, head of technology at eLife), who argued that the technical part of a librarian's position is not as difficult as the social aspects.

**Proposal 3:** Develop the suggestions made by the employers about necessary skills, that should be implemented in the education of a librarian, by:

1. Focusing on leadership and project management skills.
2. Increasing the focus on data science as a strategy.
3. Increasing awareness of a market-orientated approach for students in choosing courses and the operationalisation of the multidimensional and changing skills students need to meet the challenging demands of the information marketplace.
4. Improving teacher support in the development of data-curation, hosting, analysis and training activities and also in the creation of communities and building spaces for inclass exercises. These are core knowledge skills and attributes vital for effective professional practice, which require more than a theoretical academic approach to these issues.

Digital tools have great potential for integrating studies and class exercises in the information science and

cultural studies streams at IVA. Consequently, both staff and students have opportunities to become increasingly multidisciplinary competent by developing the ability to think/work across cultural and domain divides, disseminating knowledge across different paradigms and importantly, collaborating.

### Final Reflection

While the need to skill up and address the employability of new graduates can seem intimidating and almost a race to keep up with technology, this was not the take home message of the DST4L. The DST4L was about responsibility for own learning. **Hence the responsibility for a student's learning is not solely IVA's.** At IVA we suggest an increased emphasis on the student's responsibility for own and continued learning when the education at IVA is completed, i.e. the **discipline and passion it takes to continue learning and developing skills.** The student group BADASS is one example of how students at IVA are taking responsibility for their own educations and futures. BADASS students are intent on enriching their education through peer teaching, broadening their knowledge base and skill development, and networking with industry and library communities to make themselves visible as future mediators of the connections between information and user communities. Making a connection with the information and with the communities surrounding the medium is the traditional role of the IVA graduate and one of our strengths. This has not changed. It has shifted slightly; a small shift from studying the behaviour between a user and culture surrounding a book, journal, museum object or user group to also studying the user and culture surrounding a piece of software. A repercussion of this shift is that the future of the information professional is collaborative. The evolution of the IVA student into a career as an information professional will consequently be a combination of both an acquaintance and in some cases mastery of digital methods as well as the ability to collaborate, facilitate, innovate, and inspire their community.