Integrated Programme Administration System (IPAS) Requirements Gathering Exercise: Business Analyst Briefing

Aim

1. The aims of the requirements gathering exercise are:

    a. To define a complete set of requirements to realise the University's ambition for an integrated programme administration system (IPAS) which will be the single point of truth for programme and module information.

    b. To define the data model needed to deliver the requirements.

    c. To define a 'go-to' process and reporting structure for programme administration which can be used to evaluate potential solutions.

    d. To quantify the business resource to implement the requirements which will inform the development of a business case to secure the necessary funding (internal IT and hardware costs having already been approved in principle).

Outputs

2. The requirements gathering exercise will address the aims set out in section 1, above, in the form of an IPAS Requirements document, which should include sections covering:
    a) Introduction and background
    b) Business process models – 'to be' model
    c) Function models (context diagram or use case diagram)
    d) Use Case or User Scenarios
    e) Data models (ERD, or data class model)
    f) Requirements catalogue (the list of requirements from the categories above)
    g) Glossary of terms.

The Programmes and Module Portfolio

3. The University has a programme catalogue of c1500 taught and c400 research degree programmes, counting all variants which are active in 2014/15. The module catalogue includes over 4000 modules.

4. Programmes may be single (one discipline) or joint honours (two or more disciplines) and may, and increasingly will, include additional flexibilities including major/minor combinations, common first year with subsequent pathways, one or more period(s) of up to a year (out) in industry/study/enterprise, UG masters, integrated PhDs, Professional Doctorates, multiple pathways within a single programme, joint programmes with other UK and overseas universities, flexible and distance learning provision. There are also 'non-degrees' and fall-back awards.

5. Programmes are made up of a mix of core (compulsory), optional (compulsory student choice from a short list) and discovery (optional student choice of 1000+) modules. The same modules can be in more than one category.

6. Medicine has a non-modular programme with its own very distinctive complexities and flexibilities[1].

7. The data model defines the information requirements and relationships for all programmes. In defining the data model it will be important to develop a taxonomy describing the range of programmes and their interrelationships (both those programmes currently offered and to accommodate aspirations for more flexible packages of programme delivery in the future).

The University's need for IPAS

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[1] Laura Stroud is the key contact in the School of Medicine

8. IPAS will provide:

    a. an accurate, accessible and easy to use catalogue of module and programme information for use by staff and students.

    b. module and programme catalogues and data model to support, record and manage the complete lifecycle of the University's developing portfolio of programmes and modules. This will include managing the workflow and content to meet the University's requirements for online-course information (OCI).

    c. the official University record of the description and status of all programmes and modules which are required, by internal processes and by our accountability to external authorities, to be accessible, accurate and up to date with a clear audit trail to the academic governance empowered to approve the curriculum.

    d. the definitive single point of truth and data source for linked systems utilising information on modules and programmes (to include timetable, module enrolment, school and faculty websites, LfL, VLE, Portal, CRM, Coursefinder, Exam Scheduler, Banner Student Record System etc).

    e. future-proofed workflow support, content management and reporting for the process of planning, creating, approving, reviewing, amending and retiring modules and programmes.

    f. streamlined non-paper-based processes to ensure work is done once, in the most appropriate place, by the appropriate role and to the required quality, removing duplication and unnecessary double-checking.

    g. the framework to support, record and enforce the Quality Assurance processes and workflows which guarantee the value of the Leeds degree, embed the (new) Leeds Curriculum and which underpin the University's strategic vision for an innovative and flexible portfolio of programmes.

Timeframe

9. The requirements gathering exercise must be completed and signed-off by the Working Group and SES Programme by Friday 19th June.

10. The requirements gathering exercise must accommodate in its scope and resource requirements that the aim is for the IPAS to go live for the start of the programme approval process in October 2016

11. The requirements gathering exercise should make recommendations on the approach and timing for the IPAS implementation.

IPAS Scope

12. The detailed scope of IPAS will be developed from the high level process provided. It will include both the taught and research degree portfolio.

13. The requirements gathering exercise will need to consider the need to migrate data from current systems to the new system and the archiving, in a readily accessible form, of data that is not transferred.

Consultation Process

14. The size, complexity and diversity of the University's academic provision and administrative processes means that the success of the requirements gathering exercise will be determined by the breadth and depth of the consultation from which the requirements emerge. There are not, nor should there be, any shortcuts. All existing assumptions and documentation must be evaluated and any pre-existing requirements re-examined to confirm their validity.

15. The BA will be supported by an IPAS Requirements Gathering Project Group of key individuals who have a combination of personal expertise in aspects of IPAS and leadership/management responsibility for additional staff or groups of staff who have that expertise.

16. The IPAS Requirements Working Group will be the starting point for consultation and for help in designing the wider consultation process. Groups of staff that should be included/sampled in the consultation exercise will include:

Student Education Services

i.	Student Education Service Directors	vii.	Exams team
ii.	Quality Assurance Cross Institutional Functional Management Team (CIFMT)	viii.	Timetable team
		ix.	Student Funding team
		x.	SES Programme team
iii.	QA team	xi.	Admissions
iv.	Catalogue team	xii.	Strategy & Planning
v.	Digital Learning Team	xiii.	Postgraduate Research and Operations Team
vi.	Student Operations team		

IT

i.	SIMS team	iii.	Teams responsible for systems which link to IPAS (see para 9d, above)
ii.	Enterprise Architecture team		

Academic

i.	Faculty Pro-Deans for Student Education (n=9)	iv.	Programme Leaders
		v.	Module Leaders
ii.	School Directors of Student Education (n=32)	vi.	Academic staff responsible for Postgraduate Research Studies
iii.	Discovery Theme Leaders (n=10)		

Benefits Realisation

17. The benefits of introducing IPAS will include:

a) The replacement of a module and programme catalogue that is no longer fit for purpose.

b) Effective, integrated process and systems support for the development of a more innovative, flexible and responsive programme portfolio.

c) Efficient management of workflows associated with module and programme approval (for approval of both new and amended provision).

d) An online catalogue of programmes and modules which is attractive and useful to prospective and enrolled students.

e) Removal of manual processes and (double) checking which releases staff for more considerative work.

f) Ability to integrate systems, processes and workflow to generate accurate and up-to-date online course information.

g) Increased security in relation to external quality assurance requirements.

h) Establishing the definitive single point of truth and data source for any systems needing information on modules and programmes.

i) A future-proof framework capable of development to meet the needs of the University's vision for a comprehensive, diverse, flexible and innovative portfolio of programmes and modules which will attract the best students to Leeds.

j) Benefits will be reviewed, assessed and updated as part of the requirements gathering phase.

Project Drivers

18. The problems we are aiming to address include:

    a) The current system is too restrictive and doesn't allow the curriculum development and flexibility we need to meet student expectations and market forces.

    b) The catalogues do not integrate with Banner; as a result both systems need to be manually updated, leading to inconsistencies which directly affect student records.

    c) The QA-based language used in the system is inappropriate for student audience (hence re-writing and duplication required for marketing).

    d) The catalogues are 'dated' (look, feel, technology, etc).

    e) The catalogues are not intuitive or user-friendly for inputting data or querying/reporting.

    f) The catalogues are term effective and not term dependent (ie they only show modules and programmes where changes have been made), which makes them difficult to interrogate.

    g) The catalogues do not allow efficient update of data.

    h) The Programme Catalogue does not allow the recording of content of programmes depending on start date (January, April intakes, etc).

    i) The catalogues do not have sufficient verification and so data quality is patchy.

    j) The catalogues do not handle amendments to modules or programmes very well, ie there is no version control functionality and users can't see what has been updated and it is time consuming when modules involved in programmes need to be removed.

    k) The reports available to support the approval process are out of date and out of line with University Policy and no longer fully address evolved sector requirements and frameworks.

    l) Flow of information is patchy between areas and does not consistently follow the same route.

    m) The catalogues do not hold all relevant data on modules and programmes that is required for other processes (eg timetabling data, examinations data, admissions).

    n) The catalogues do not integrate directly with Exam Scheduler software and Timetabling software.

    o) The catalogues do not facilitate collaborative working, both within and external to the University, to create modules or programmes.

    p) The catalogues have limited text editing and formatting capability.

    q) The current web interface does not allow students /prospective students to see what the programme looks like/will look like for them.

19. What we want to stop doing

    a) Investing scarce development resource on an in-house developed system.

    b) Transferring paper-based information to online forms.

    c) Accepting that the catalogues and Banner are likely to be out of sync.

    d) Entering the same data into two or more systems (catalogue, Banner, timetable, OCI) and maintaining local databases to manage the same/additional programme information

    e) Double-checking data which we should be able to rely on as being correct, eg for the Programmes and Assessment (Operations) we need to stop:

        i. sending out annual lists of modules and compulsory modules to Schools;

        ii. updating Banner data for programmes with several intakes a year;

        iii. having to check with the QA team/Schools specific pieces of information which we should be able to rely on in the catalogues;

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locking/unlocking records;
checking paperwork to pick out information relevant to area of responsibility;
manually flagging programmes and modules as approved when necessary;
running data quality reports to check inconsistencies between Banner and the catalogues;
sending out examination lists of modules to schools asking them to annotate the lists with materials required for each exam.

Governance

20. The project will be overseen by the IPAS Requirements Gathering Project Group, reporting via the Project Manager to the SES Management Team and the SES Programme Team. The Group will oversee the overall direction of the Project, provide functional and business expertise, review progress and agree actions to ensure the project moves forward.

Requirements Gathering Sign-off

21. The outputs of the requirements gathering exercise will be signed-off by the IPAS Requirements Gathering Project Group in the form of a recommendation to the SES Programme.

David Gardner
IPAS Requirements Gathering Project Group
draft v9
28th April 2015