2010

University Park
Undergraduate Association
Academic Affairs Committee

Chairwoman Courtney Lennartz

[REPORT OF THE REGISTRATION PROCRESSES REVIEW COMMISSION]

The formal report of the activities of the RPRC, formed by Resolution 02-05 of the University Park Undergraduate Association.

Contents

URLs for Reference Materials

BYU's MyMAP: http://saas.byu.edu/registrar/mymap/

PSU's eLion: http://elion.psu.edu

University of Minnesota Planner: https://onestop2.umn.edu/gradplanner/home.jsp

UPUA: www.upua.psu.edu

Overview of RPRC's Legislation, Mission, and Goals

In March 2010, the Academic Affairs Committee leadership began to explore a wide variety of solutions to improve the registration process at Penn State as it relates to classes. The leadership of the committee looked at several systems used at other schools after completing a thorough evaluation of the concerns surrounding eLion and the positive points and flaws of the system. Realizing the magnitude of the effort, the committee leadership subsequently took the concerns to the committee as a whole, proposing that the committee sponsor to the University Park Undergraduate Association (UPUA) an idea to create a dedicated sub-group to work on the evaluation and reevaluation of the services available at other schools and the software available at Penn State. The charges, laid out in UPUA Resolution 02-05, included a variety of instructions and rules regarding the new group dedicated to this project. The group, formally called the Registration Processes Review Commission (RPRC), was, among other things, instructed to:

- evaluate the system in place at Brigham Young University (known as MyMAP)
- establish a University workgroup between students, the Registrar, the Office of Undergraduate Education, the Division of Undergraduate Studies, and the Information Technology Services
- review and update the eLion change priority list maintained by the eLion Governance Board

The group, led by the Academic Affairs Committee Chair, was to be made of interested UPUA members, administrators, community members, and any other people (at the discretion of the RPRC and its leadership) who have a vested interest in improving the course registration and scheduling processes at the University. At the time of writing, the commission is composed of 6 students, with plans to add several other members from the University.

The RPRC decided, immediately upon formation, that the most compelling arguments for a restructuring of Penn State's systems would be to exhort the benefits that advanced systems at other schools bring. Several other schools have advanced software programs that they have recently unveiled. These schools are aware of their place of leadership in the field and are, by and large, willing to assist schools like Penn State – an institution that the RPRC recognizes is too large to change rapidly. The RPRC intends to leverage this helping spirit and assistance in order to compel Penn State to create and adopt new software.

The RPRC's main function is not to force adoption of the software. UPUA's interest in the process, through its RPRC, is to build a group that can legitimately compel the University to change. UPUA hopes that the workgroup (the second point in the list above) with key administrative entities will be the group that ultimately leverages the authority and money to meet the goals of improving the registration systems. The RPRC intends to provide the data and rationale for doing so.

Current Problems with Penn State Systems

Schedule of Courses not linked to anything else

If a student wants to schedule courses for their upcoming semester, he/she must use Penn State's Schedule of Courses is a completely separate website from ELion. This makes the registration process for classes much more complex and time consuming than necessary. If the Schedule of Courses was incorporated into the Elion registration process, than a student can look up the available section he/she wants to enroll in, and simply click an "enroll" button right next to that section, instead of typing in the course number into Elion.

No Profile Capabilities

Students log on to a general eLion page when they enter the system. The page has little personalized information. A "home page" of eLion may be useful for students. An individualized profile page listing Holds on the student's account, the classes being taken by the student, and other information would make eLion more user friendly. "Profile pages" listing general and useful information are becoming more common in web tools (ANGEL, new media, etc) and students are growing more comfortable with them.

Separation of Functionality

The eLion system is useful for the Registrar, Bursar, Financial Aid, and Advising offices. Although each of those entities have pages on eLion, they are all disparate. They could be better organized (either into categories for function instead of by alphabet) or the common functions for all could appear on a centralized profile page, allowing students to access the information for each entity with ease.

The Degree Audit does not distinguish what is and what is yet to be

The degree audit is not always completely updated with degree requirements. Some requirements for specific majors are always changing, and the degree audit very rarely recognizes that. For example, the entrance to the Smeal College of Business requirements change as years progress and the degree audits for each student does not identify that. The degree audit system should be revamped in a way that distinguishes exact requirements for entrance to majors and deadlines for each student.

Degree audit (DA) hard to read/DA is not dynamic – students can't decide what counts where

When it comes to information needed by students often regarding their education path, the Degree Audit is a central source. While a wealth of information is available and there is flexibility in this source, the degree audit severely lacks clarity. It is full of abbreviations; GHs Rs, and NOs, most of which are not easily discernable. Moreover, sometimes courses aren't mentioned in both places when they count twice. This is either designated by a memo somewhere on the audit or must be taken care of by a visit to an advisor. The categories in the audit are well placed, but still lack clarity. With some better explanation, easier to read font that designates categories, and less memos, the degree audit can become much easier for students to read across the board.

DA takes time to prepare every time

When rushing to check the degree audit before an advising appointment or a trip to the Registrar's office, a student finds that the audit takes time to prepare and is "not ready." Students also view their degree audit once, and then go to revisit it and find that it is not in their available degree audits anymore. If the system were to hold some of the degree audits for a longer period of time, the degree audit would be more efficient for students. The system must be upgraded to support a quicker download time and the ability to cache degree audits. That eLion does not cache data is a problem in several situations (e.g. the GPA prediction tool). Allowing for caching in a new system may also reduce the amount of effort needed by the Registrar's server systems.

Slow

The Elion system is very slow and that can result in missing an available section to enroll in the next semester. There is time wasted from waiting for pages to load and logging into various steps of the registration process, and that can make all the difference in scheduling a course. The system should be updated so that slow-loading pages and logging in shouldn't be an issue. If information were stored within the system (in a cache, for example), this problem may be mitigated.

Lack of planner utility

Within eLion, there is a need for a feature that allows students to plot out what courses they need in future semesters in order to graduate in a given semester. Although the degree audit provides information on a sample 4-year schedule, the need has arisen for a more 'flexible degree audit,' that allows students to click and drag courses into a template, giving them the ability to rearrange and delete them. A credit calculator would also be a nice supplement to this feature. It could keep a running total per semester and for all majors and minors (selected first) to help students plan ahead with their courses.

Not user-friendly: Hard to Read

There are minimal colors and useful distinguishing marks to help students navigate through the system. The system is hard to navigate and read, making it difficult for students to find exactly what they need because it is, in this sense, not user-friendly. Allowing for colors and more useful markings than the current "-" or "+" would make the system more intuitive and easy to read quickly. No tutorial should be required in order to govern a students' path through Penn State; it should be easy to use and comprehensible to all students.

Lack of detail in course descriptions

The lack of detail of the course bulletin in addition to the lack of integration between the course bulletin and both eLion and the schedule of courses make it cumbersome and ineffective. More detailed course descriptions and possibly even a featured syllabus would allow students to better comprehend the scope of the class and anticipate the exact topics covered; This would allow students to better plan ahead with their courses, and may result in a decreased number of course 'drops.' Linkage between the course bulletin and the schedule of courses would allow students to more conveniently evaluate a course description. A link on the left margin of the eLion homepage to the course bulletin would permit students to evaluate a course at the same location

as their schedule and drop/add features. In addition, a link to the course bulletin would facilitate eLion's role as a portal for students.

Highlights from other school's systems

The preliminary investigations conducted by the RPRC found that a small number of schools implemented software that completely changed their registration processes. Though these schools, for the most part large like Penn State, had similar problems as those described in our "Current Problems" segment of the report, their innovative software solutions worked to mitigate the difficulties presented to students, faculty, and administrators.

Before we investigated more thoroughly, we decided to compare the systems at several of the schools. Below are summary highlights from the other software systems in place at University of Minnesota, Brigham Young University, San Diego State University, and the University of Southern California.

University of Minnesota

The University of Minnesota provides a powerful "graduation planner" for students to use. The strengths of the software include its near-total integration with the advising corps at the University. Advisers and students can communicate through the planning tool. A second, perhaps more important strength, is the software's ability to integrate graduate plans with graduation requirements. In Figure 1, the panel on the right shows the requirements that are yet to be planned. The main panel shows the plan by semester. Upon planning a course that will meet a requirement, that requirement's entry on the right panel will disappear.

Graduation Planner tutorial

To the best of the RPRC's knowledge, this system does not integrate course registration or scheduling options as some other software programs do. The planner's integration with the degree audit software is impressive: when a student plans a course, the degree audit picks up that a requirement is planned and marks it with a special distinction.

In several ways, the real strength of the UM course planning tool is that it brings important information for students into one place. Thus, students can find what they need for their degree without looking through a multitude of websites.

Brigham Young University

The RPRC was particularly impressed by the Brigham Young University system. It was unique in its near-complete integration with academic needs throughout the University. The software has several important key components: a student profile page, a planning page that merges degree requirements and degree progress, an organization page, and course registration within the system. (NOTE: because this system was worth exploring in a technical and qualitative way, we will save much of our discussion for the next section, *"Case study: Brigham Young University."*)

The system, called "My Major Action Planner" (MyMAP), integrates the registrar and bursar capacities, uses tables and reports effectively, and weaves colors and other improvements to usability in wherever possible. The usefulness is reflected in the number of students that use the service: approximately 83% of students use the software.

The RPRC found the centralization of information on the macro- and micro-level to be very important. At the macro-level, there is a lot of information about *how* to get a degree in any

given major. The classes and other requirements are easy to find. At the micro-level, there is a lot of information about a particular student's progress and what he or she needs to do in order to graduate in any given semester. The easy-to-find information is a major boon to students.

San Diego State University

The RPRC includes this school as a sort of "basic" set of information. The tool, also called MyMap, does not offer additional integration, but it does bring together degree requirements in a very clear way. It offers students the chance to plan their courses by hand by providing to them a well laid out semester-by-semester plan of the kinds of courses they require. This is available for most or all of the school's major programs. The lack of integration makes this a poor choice for an upgrade, but the RPRC wanted to include it for the purpose of comparison to schools with integrated planning software.

University of Southern California

While this system also lacks a lot of features the RPRC saw in the most innovative software systems at places like Brigham Young University, the unique approach to course registration is worth mentioning. When registering for classes, USC students see a split-screen. The top frame provides navigation buttons and a listing of the various academic programs offered at USC. The middle frame, titled Current Course Selections, displays the courses a student might wish to add to his or her schedule. The bottom frame, titled System Response, provides a location for messages as processing occurs. The bottom toolbar provides navigation aids.
The RPRC thought that this split-screen method could be useful (compared to multiple windows and a lack of connection between the schedule of courses and course registration) though the lack of integration with other functions, such as degree audit, advising, and course planning severely limit this system's utility.

BYU Case Study

Introduction

Charged by Resolution # 02-05 of the University Park Undergraduate Association, the RPRC comprised of the Academic Affairs Chair Courtney Lennartz, the Academic Affairs Vice-chair Dan Hemmert, Representative Mark Cannon, and Former Chair Samuel Loewner, reviewed

technical information regarding the "MyMAP" software from the Brigham Young University's registrars office. The purpose of this review was to gain an understanding of its usage by the student population as well as an understanding of the development process of the software design.

The RPRC first met with BYU's registrar Jeffery Bunker, the primary MyMAP project manager and Associate Registrar Barry Allred, and an undergraduate advisor. They each explained their need for a system such as MyMAP and the steps their departments went through to implement the current system. Their goal is "to tie registration to class scheduling, career planning, create progress report (degree audits), and catalog information all in one system."

Summary of BYU Student Service Web System

Student Summary Tab Page

The Student Summary Page is unique to each student. It is only accessible to the student and university personnel with a legitimate need to view the information, such as an academic advisor. (See Figure 1.)

Figure 1. Student Summary Page

Here a student can see a snapshot of where he or she stands. Like all the pages in this system, it is updated as the student makes changes. The student's major, minor, graduation date, academic standing, and advising contact information is all grouped under the Academic Program tab. Personal information including email address, and any holds on their bursar account is another tab on this page. The number of credit hours and GPA is also displayed on this page. Each hour

is further broken down into groups such as transfer credits, BYU credits, total credits, etc. A picture of the student also appears on this page, if further verification is necessary.

Embedded in this page are links to further explain or redirect a student to find more information. For example, in the red box is the student's primary major. A link is embedded in the name of the major so that a description of that major and its recommended academic map can be viewed if needed. (See Figure 2.)

Figure 2. Recommended Academic Map

According to BYU's registrar, the advising center finds the Student Summary Page especially helpful and is used quite often. For advisors, everything they need to know about a student is found on one up to date and easily accessible page.

Plan Tab Page

Students can create their personalized academic plan using this page. Both University requirements and electives are displayed. The credit hours, grade received, and status are also shown next to each course planned.

There are three different statuses that appear: Complete, Planned, and Not Complete. A further explanation of a particular status is shown below it if necessary (ie. where a course was

completed.) Testing credits are also displayed on this page. Statuses are automatically updated. (See Figure 3.)

Figure 3. Plan Tab Page

Select a program and the courses you will use to complete the requirements for that program.

While every reasonable effort is made to ensure accuracy, there are some student populations that could have exceptions to listed requirements. Please refer to the university catalog and your college advisement center/department for complete guidelines.

Selected Program: University Core 2004-Present
Program Code: 111120
Entry Year Term: Summer 2008

Explore Other Majors/Minors | Change Major | Progress Report
Independent Study

University Core 2004-Present (PRE) (GE) ▾

☐ Advanced Planning Mode

Program Plan

Program Requirements	Credit	Grade	Status
THE INDIVIDUAL AND SOCIETY - COMPLETE 2 REQUIREMENTS			
1. AMERICAN HERITAGE - COMPLETE 1 OF 3 OPTIONS Select Course Add Note			Requirement Planned
Note: Edit Delete Take exam			
OPTION 1.1 - COMPLETE 1 COURSE			Requirement Planned
A HTG 100 - American Heritage	3.0		Planned - Fall 2010 - Unplan
2. GLOBAL AND CULTURAL AWARENESS - COMPLETE 1 OF 3 OPTIONS Select Course Add Note			Complete
OPTION 2.2 - COMPLETE 1 COURSE			Complete
HIST 202 - World Civilization from 1500 †	0.0		Course Waived [WVR] - Plan Here
SKILLS - COMPLETE 4 REQUIREMENTS			
1. FIRST YEAR WRITING - COMPLETE 1 COURSE Select Course Add Note			Complete
ENGL 150 - College Writing & Reading	3.0	IP	Completed by Exam : AP 2007 - Plan Here
2. ADV WRITTEN & ORAL COMMUNICATION - COMPLETE 1 OF 9 OPTIONS Select Course Add Note			Requirement Planned
OPTION 2.1 - COMPLETE 1 COURSE			Requirement Planned
M COM 320 - Commun in Organiztnl Settings	3.0		Planned - Fall 2013 - Unplan

* Note: Students will remain unaware of a schedule change until the course is officially scheduled.

Anywhere that a course name is listed there is a link to the course description, credit hours, recommended pre-requisites, and what semester the course is offered. Next to each course name is a *select course* and *add note* button. The select course button takes the student directly to the course registration page. The add note button allows students to make a note about that particular course. For example, a student can put, "Take this class senior year." (See Figure 4.)

Figure 4. Add Note Button Screen

3. QUANTITATIVE REASONING - COMPLETE 1 COURSE Select Course Add Note			Complete
G E 106 - ACT Math	0.0		Course Waived (TWV) - Plan Here
4. LANGUAGES OF LEARNING - COMPLETE 1 OF 4 OPTIONS Select Course Add Note			Complete

Add Note ✕

Add Note is a simple tool you can use to indicate your intention to satisfy a requirement by some means other than the courses listed in the select course button. Typical uses will be: indicate transfer work you plan to do in the future, challenge exam credit, and external tests like AP, IB, ACT, SAT that may not be posted on your record yet. Remember that you may need approval from your college advisement center (CAC) to use some of these other options. Please contact them before you register for a class or exam. You may also use this tool to indicate your intention to take a class, but are unsure which one you want.

"Add Note" will not be calculated into your requirement status, so it will still show "requirement not complete". Once you have completed the exam or transfer class and it is on your BYU record, plan the requirement by using the advanced planning mode, and then the status will change. You can then delete the note.

Examples of "Add Note":

- Transfer Math 1010 from UVSC
- Spanish Foreign Language Challenge Exam
- Need an extra religion class

Save Note | Cancel

Multiple programs, or majors, can be planned for by using the *Explore Other Majors* button. Once a major or minor is selected, the recommended academic plan is displayed. Here, students can see how many credits they have earned for that particular major. (See Figure 5.)

Figure 5. Recommended Academic Plan

College:	Life Sciences
Department:	Physiology & Dev Biology
Major:	Biophysics
Type:	MAJOR
Degree:	BS
Code:	285720
Year Term Entered:	Biophysics is not your official major. If you have questions about the Biophysics major you are exploring, or if you would like to change to or add a Biophysics major, contact the advisement center
Status:	Not Complete
Program Hours Completed:	0.0
GPA:	0.00

Program Requirements	Credit	Grade	Status
Requirement 1 - Complete 6 courses			**Requirement Not Complete** Complete: 0.0 Planned: 0.0 Deficient: 6.0
Life sciences core courses:			
BIO 420 - Evolutionary Biology	2.0		
MMBIO 240 - Molecular Biology	3.0		
MMBIO 241 - Molecular & Cellular Bio Lab	1.0		
PDBIO 120 - Honors Science of Biology	2.0		
PDBIO 360 - Cell Biology	3.0		
PWS 340 - Genetics	2.0		
Requirement 2 - Complete 8 courses			**Requirement Not Complete** Complete: 0.0 Planned: 0.0 Deficient: 8.0

Also on the Plan Tab page is a progress report button. Here, students can view their progress in a particular program. This feature is known as a degree audit at Penn State. The program's general education, major, and minor requirements are all listed along with the status of each requirement. (See Figure 6.)

Figure 6. Program Progress Report

GE and University Requirements	Status	Completed Courses		Registered Courses	Planned Courses
The Individual and Society					
American Heritage	Planned				A HTG 100
Global and Cultural Awareness	Complete	HIST 202	WVR		
Skills					
First-Year Writing	Complete	ENGL 115	AP		
Adv Written & Oral Communication	Planned				M COM 320
Quantitative Reasoning	Complete	G E 106	TWV		
Languages of Learning	Complete	MATH 112	AP		
Arts, Letters and Sciences					
Civilization 1	Complete	ARTHC 201			
Civilization 2	Complete	HIST 202	WVR		
Arts and Letters (1 course each)	Not Complete	HUM 101	TRN		
Biological Science	Planned				BIO 100
Physical Science	Complete	PHY S 100			
Social Science	Complete	ECON 110			
Book of Mormon	Planned	REL 121	TRN		REL A 122
New Testament	Complete	REL A 211			
Doctrine & Covenants	Planned				REL C 100
BYU Religion Hours	Not Complete	REL A 211			REL C 393R

Organize Tab Page

All planned and scheduled courses automatically appear on this page under the *Unorganized Folder*. (See Figure 7.)

Figure 7. Organize Tab Page

Students can then organize their courses into specific academic year semester folders. The MyMAP system **will not allow** a student to put a course into a semester folder if it is not offered at that time. The system looks at the current course schedules to determine which semester a course is taught and provides a disclaimer saying a course may not be taught at this time next year. (See Figure 8.)

Figure 8. Academic Year Semester Folder

Pre-requisite checking is currently implemented in the MyMAP system, however, the registrar is working to find a way to enforce it. A pop up box appears when a student plans or registers for a class that they have not met the pre-requisites for. Non- course pre- requisites, such as dance or musical auditions, are currently enforced by the advisor. (See Figure 9.)

Figure 9. Pre- requisite not met pop-up window

*Note this function requires the individual academic departments to "clean up" the required pre-requisite courses, for classes. The departments, therefore, create a committee that evaluates the pre requisite requirements to determine if they are actually needed and how to enforce them.

Registration Tab Page

Here students can add, withdrawal, or drop classes for the current semester available for registering. Registration goes by semester, like the Penn State registration system works. *Planned courses are pulled over from the Organize Tab Page automatically so that the student can register for the semester that is currently open.* Advisors can also register for students if necessary. (See Figure 10.)

Figure 10. Registration Tab Page

Registered Courses
Your current and future registration is displayed below. In this section you can add, drop, or withdraw from classes.

| + | Summer 2010 (21 Jun 2010 - 09 Aug 2010) Registration |

| + | Fall 2010 (30 Aug 2010 - 09 Dec 2010) Registration |

Planned Courses
Use the links in the "Add" Columns below to add planned courses to your schedule
While every reasonable effort is made to ensure accuracy, there are some student populations that could have exceptions to listed requirements. Please refer to the university catalog and your college advisement center/department for complete guidelines.

2010 - 2011

Fall 2010

Add	Course	Hrs	Title
Add	A HTG 100	3.0	American Heritage
Add	DANCE 231	1.0	Jazz Dance Technique 1
Add	MUSIC 260	4.0	Organ
Total Hours:		8.0	

Winter 2011

Add	Course	Hrs	Title
Add	CHEM 101	4.0	Beginning Mandarin
Add	REL C 100	2.0	Intro to the LDS Church
Total Hours:		6.0	

Spring 2011

Add	Course	Hrs	Title
Add	TMA 387	3.0	Production Mgt: Advanced
Total Hours:		3.0	

Summer 2011

Add	Course	Hrs	Title
Add	REL C 393	6.3	Family Hist in Great Britain
Total Hours:		6.3	

To register for a planned course, students click the add link next to the course name. This link opens a registration window with the sections and times of available classes listed. For courses that require a professor or advisor's approval, a "permission to add code" is given to the student to enter upon registering. (See Figure 11.)

Figure 11. Course Registration Sections/ Times

						1:00p - 1:50p	F	175	JSB			
Taught At Salt Lake Center												
-	A	103	SALT LAKE	25	40	3.0	9:30a - 10:55a	T	313	SLC		103	Fish, Rick Jay
-	A	102	SALT LAKE	20	40	3.0	9:30a - 11:55a	W	316	SLC		102	Shoum, Joan H
-	A	100	SALT LAKE	27	40	3.0	9:30a - 11:55a	Th	316	SLC		100	Shoum, Joan H
-	A	098	SALT LAKE	32	40	3.0	12:00p - 2:25p	M	411	SLC		098	Sargent, Kathryn P
-	A	101	SALT LAKE	31	40	3.0	5:00p - 7:25p	M	306	SLC		101	Fish, Rick Jay
-	-	099	SALT LAKE	0	40	3.0	5:00p - 7:25p	W	411	SLC		099	Latimer, Brett Hugh

*P - Permission to add Code   **A - Add

| Close Window |

When a student registers for a planned course (i.e. American Heritage outlined in red) it is automatically moved from the planned courses folder into the registered courses folder. (see Figure 12.) According to BYU's registrar, 83% of students make a course plan and register from it. This is expected to increase once the current seniors graduate.

Figure 12. Registered Courses Folder

A *Rain Check* option also exists within the MyMAP system which creates a watchlist through the registrar that contacts students on the list when openings are available. Also note that, as seen in Figure 12, the system tells students their registration status and dates for easy reference.

Technical Aspects

The current MyMAP system was primarily built with one programmer. It was stated that to build a system such as MyMAP, programmers must start small by making sure all other systems are under the same umbrella (ie. MyMAP). Once everything exists under a singular system, you can build from there by bringing in advising, registrar information, information technology, etc. It is also important to decide if the system is student centered or administratively centered.

Brigham Young University's IT department is developing a second version of the MyMAP system to implement several new features and to fix the problems found with the first version. (See Figure 13.)

Figure 13. MyMAP system technical chart

Version 1	Problems	Version 2
-Oracle System	- No transfer credit tool	- Java based
- Written in "c"	- Slow page loading	- Several interfaces

- Single programmer	- Difficulty reading from outside programs	- Multiple programmers
- Undergraduate students	- No holistic course planning	
	- Graduate students use different system	

Currently undergraduates primarily use the MyMAP software. This is because graduate school academic program plans are so diverse that the system does not recognize them. However, committees are in place for graduate students to submit their academic plan to for approval and implementation into the current MyMAP software.

Designs of Version 2 of the MyMAP software integrate registration chat capabilities so that students can chat with their advisors online during the registration period.

In the future, BYU's registrar hopes to generate detailed reports for the academic colleges and departments to use as a registration planning tool. Like Penn State, several courses at BYU are under enrolled. By having this report, the number of seats per semester can be more accurately planned for. Also, a guess system may be implemented so that other schools can have access to the MyMAP software.

Student Feedback: Focus Group Information

The RPRC, in conjunction with BYU's student government, met with three different student focus groups upon their visit. The purpose of these focus groups was to gain insight from a student's perspective of the MyMAP software capabilities and usability. Each focus group was conducted in similar fashion; a brief introduction, general questions about MyMAP, likes and dislikes of the system, and a brief overview of eLion.

Below, find summaries of the RPRC findings from the focus groups. Unless otherwise noted, quoted remarks should be attributed to Brigham Young University students.

Focus Group 1: Students of all classes present, international student, broad range of majors.

This diverse group of students all said they use MyMAP quite frequently, especially when choosing a major and during registration periods. They find it to be a convenient way to track their program progress and to plan ahead. Like many schools, students in their freshman year focus on general education requirements, and the students agreed that the general education system was easier to navigate when they used the planning utility. Freshman in engineering are required to take a freshman seminar class on MyMAP. Students reported that it was "easy to switch to MyMAP" and that "it's a hassle to if you're far in your academic career and just switching over concerning planning." Some students noted that "Professors change their minds [regarding] when classes are offered so this is inconvenient to try to plan for." A senior noted

that students in his class used the tool mostly for planning on a semester-by-semester basis and not for all four years.

Students' favorite features include "that all the courses offered are available and easily accessible. Convenient it was all in the same place." Freshmen report that it is "really easy to use."

"[My] least favorite aspect is that during registration time the server slows down."

"The academic planning is a hassle when you change majors because each class has to be individually taken off or added. "

Students "found it helpful to have a seminar dedicated to MyMAP." International student said it was very easy to learn and that "If I went to Penn State I wouldn't know how to do it [without a class]"

"When students apply for graduation, they have to show your academic plan, MyMAP makes this easy."

"[We] don't really use progress report; it is not something frequently referenced. We only use it during registration. But it is easy to read. The transcript is linked to this. [It's] helpful when getting the GE completed."

"Never heard other students complain about this program." A reasonably well rounded sample are using this software.

"Engineering has issues with clearance with pre req. Does not explain why you can't register, only says that there is an error in registration." This problem appeared to be rather localized.

"It is def worth looking into MyMAP, eLion seems so complicated."

"LOVE the idea of having a syllabus attached to registration of classes. BYU has a two-week drop/add period."

Focus Group 2: Grad student present. Mostly seniors present, two sophomores.

"Generally used about once a week. Just when registering is when the older students use it. One student said they use it infrequently."

"Favorite feature is that courses are planned out, and it's done as registration opens. We just click add."

"List of planned, completed, incomplete is shown. Weekly layout is available to show your classes, this is helpful so you don't need to do it on your own."

"The speed is so slow to load, especially around midnight. Technical problems are annoying."

"Even computer illiterate people find this super easy."

"I really like how it lists the requirements and it automatically displays the classes available to meet these requirements."

"Difficult to find classes that cover a broad range. A search box would be helpful." The RPRC believes that this student was seeking a search utility that would search the course offerings by keyword or some other metric.

"Rarely use student summary tab (Entire group concurred). Only used it to check credit hours or GPA. But we generally go to transcripts."

"I've Never used progress report button, but I'm interested in checking it out."

"[We have] trouble exploring options outside major requirements. [We] do not have a list for all classes available.

"[I] would hate planning for all four years because I changed my mind so many times."

"I've never met with my advisors [for scheduling], MyMAP made it easy to schedule. I still asked my advisor, but advisors also use it."

"It is really intuitive, I thought it was pretty easy."

"I like how it has the colors on the side, so you don't have to spend a long time reading it."

Focus Group 3:: Mainly all seniors in this group. One sophomore present.

"Mainly used in registration. I use it once a week, I change my major a lot. Used pretty frequently."

"Anytime I'm doing any sort of planning I use MyMAP"

"[I] really like the planning feature and adding classes option. Easy to communicate with prof's via email to get the registration code. Easy accessibility to grades, classes, planning, etc. Love seeing the completed on the course registration to check off what you need to do. Progress report to check GEs is especially helpful. Everyone has different styles when planning, but the progress report is very good. Mostly helpful at the end of the semesters."

"Explore other majors tab is especially beneficial because it shows how classes that are already taken apply to different majors."

"Teacher ratings would be helpful to be implemented. Would be helpful to have better course descriptions on MyMAP."

"[I think] those who have a bad opinion [of MyMAP], would have a worse opinion of other universities' versions."

"MyMAP is a resource that people don't recognize how much we use it."

"I hear less complaints, the old system was always getting complaints."

"If you can do Facebook, you can do MyMAP."

"I've heard of a lot of parents* being able to do it even though they are less tech savvy."
*Many of BYU's students are adult learners.

"When you register your finals schedule is shown so I've actually scheduled a different section of my classes so I have a more comfortable finals schedule."

BYU System Applicability at Penn State

The major goal of the Registration Processes Review Commission is to improve eLion and, by extension, improve the academic experiences of the undergraduate community at Penn State. The exploration of the system at Brigham Young University set a standard for innovate course registration and planning system that integrates a number of functions that we at Penn State consider disparate. In this section we will briefly elaborate on the technical and nontechnical issues that may arise when trying to transplant the "ideal" system – for our purposes here, MyMAP – to our University.

A simple transplant will be impossible for technical reasons. The coding language (C+) that Brigham Young University uses is fundamentally different from the one (Smalltalk) that Penn State uses. There is no way to bring the system in directly. This means that a system must be built by Penn State in our own language. As in any major programming project, a number of problems will need to be solved by "trial and error." To minimize the time spent on errors, however, the RPRC team in Utah secured a commitment from the Brigham Young University registrar's office for collaboration. Their technical staff will assist our technical staff, at least in some manner.

Old habits can die hard. By bringing a system like MyMAP to Penn State, we would be fundamentally altering how students seek out, plan, and register their schedules. Although students rotate on a roughly four-year basis, staff are here for much longer, usually, and are accustomed to the current systems in place for academic functions. The RPRC anticipates that there will be a significant learning curve for many members of the Penn State community.

Although this may build resistance to the new system, the innovative gains and improved functionality that exist in the MyMAP system make it well worth learning.

One facet of the Penn State community, outside of students and the registrar's office, that would be impacted by a system similar to MyMAP at Penn State would be the advisers (professional and faculty). The RPRC had a chance to sit down with an academic adviser at Brigham Young University. The adviser's role in student's class planning is still remarkably important even with software to assist students in planning. Students at Penn State will, with the implementation of a system like MyMAP, require an adviser for advice regarding which courses will be most helpful for their particular plans, what options they have for substituting classes for other requirements, and the myriad of other functions that advisers serve in an undergraduate's career.

Penn State has a different set of demographics than Brigham Young University, which is primarily (though not entirely) an undergraduate institution. The RPRC, though funded and charged by undergraduates, maintains that no system can be complete at Penn State without a consideration of its impact in graduate life as well as undergraduate life. Because the software pulls data from throughout the Penn State system (student records, schedule of courses, etc), the system can adapt to a student regardless of his or her semester standing. A graduate student's career is markedly different than an undergraduate's career and the planning utility would have far less of an impact on those students. The RPRC contends that the remainder of the functions would prove useful for any student from freshmen to doctoral candidates.