Optimizing the Use of Degree Works at CUNY:

A Blueprint for Success

City University of New York
Office of Academic Affairs

April 2015
Optimizing the Use of Degree Works at CUNY:
A Blueprint for Success

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Executive Summary

Completing degree requirements in a timely fashion is a crucial goal shared by students, faculty, and staff at all CUNY colleges. Degree Works, CUNY’s centrally supported academic degree audit system, is an online tool that tracks and displays the degree requirements students have completed, have in progress, and still need to earn for their degree. The accuracy of Degree Works directly affects students’ financial aid and certification to graduate. Ensuring that Degree Works is completely accurate and is used to the fullest should be a priority for every CUNY college.

An OAA Advisement Study Group was established in fall 2011 with cross-campus and cross-departmental representation from academic affairs, student affairs, professional advisors, and faculty. The study group was charged with developing a strategy to analyze current academic advising services and resources and to make recommendations for improving academic advising across CUNY.

In May 2013, CUNY’s Central Office of Academic Affairs (OAA) issued the Advisement Study Group Report: Findings and Recommendations, which called for a plan to optimize the use of Degree Works. In September 2013, the University Dean of Undergraduate Studies established a Steering Committee and a Working Committee to develop and implement such a plan, which included leadership from OAA, CUNY’s Central Computing and Information Services (CIS), Office of the University Registrar, College Advisement Council, and Degree Works Council (Appendix A) to develop a plan to help colleges increase Degree Works usage to improve access to advisement and to ensure that Degree Works provides accurate audits of student progress.

The work plan focused on two areas: first, identifying key system functionalities and ensuring that they are appropriately implemented on all campuses; and second, developing management, workflow, and training protocols to maximize effective use of Degree Works. The deliverable for the first year of work is this document, Optimizing the Use of Degree Works at CUNY: A Blueprint for Success.

The biggest issues were found to be related to the complex system environment where CUNYfirst, Degree Works, and FACTS must interact, with one system feeding and relying on another. For example, an error in a data migration from CUNYfirst to Degree Works can quickly result in errors in Degree Works, although the error may have originated with the migration, or perhaps faulty data from CUNYfirst. The three primary areas in need of attention from both CUNY Central and the campuses to ensure smooth operations are:

- Accuracy and Data Integrity
- Training
- Marketing/Public Relations
Under the direction of the Central Office working group, an independent consultant conducted student focus groups at BMCC, Hostos, John Jay, Lehman, and Queens to assess student impressions about Degree Works. A total of 28 students participated across the five campuses. Students find Degree Works to be a valuable and user-friendly resource for navigating their academic careers. The consultant summarized students’ positive views: “Degree Works empowers students by providing them with vital information about their degree progress and options.”

Input on Degree Works was also solicited from the UFS Committee on Academic Affairs, which independently identified the same three primary areas of concern and came up with the same recommendations for improvement. The committee recommended that CUNY improve Degree Works, rather than replace it, and specifically that the University should improve the performance of the system, expand the features offered, and increase use by students and advisors.

Students like Degree Works, are using it, and want to use it more. Advisors depend on it, and financial aid certification relies on it. The University needs to work together across campuses, units, and divisions in concert to ensure accuracy, promote use, and properly train constituent users.

Recommendations

There are a number of concrete steps CUNY and the colleges can take to improve and enhance their advisement technologies and increase usage of Degree Works by students, faculty, and staff.

- Each campus must have clear processes and workflows for reporting and correcting errors and for routine maintenance. A system must be in place for Degree Works users to report errors and receive timely responses.

- Each campus should establish effective structures for ongoing communication, collaboration, and facilitation between Degree Works and FACTS staff, advisors, and staff responsible for curricular updates and the Chancellor’s University Report (CUR).

- CUNY and the colleges should undertake a marketing campaign to correct misperceptions of Degree Works, promote its benefits, and emphasize that CUNY has made an institutional commitment to using and supporting Degree Works.

- CUNY should implement Hobson’s Retain software University-wide. Retain will help colleges coordinate all communications with students. It can be used to promote usage of Degree Works and FACTS and related training materials.
• Some colleges may need to hire or repurpose personnel, make changes in organizational structure, or revise their timelines for campus curriculum approval and submission to the Chancellor’s University Report to ensure new programs and courses are properly scribed.

• CUNY Central should support the development of updated Degree Works training materials and strategies for promoting Degree Works use among faculty, staff, advisors, and students as needed. An annual CUNY-wide training program for campus trainers should be provided on how to use Degree Works features that are underutilized or have been updated, discuss best practices, and review case studies.

• CUNY Central CIS/IT can improve functionality and increase usage by undertaking the following: (Appendix M: CIS/IT Recommendations for Process Improvement of Advisement Technologies and Service)
  a. Upgrade Degree Works to 4.1.4 to improve current functionality and services.
  b. Modify FACTS logic to resolve reported issues.
  c. Hire full-time report/query writer/support staff member.
  d. Implement Hobson’s Retain software CUNY-wide.
  e. Contract with Ellucian for professional services to include:
     • Modification of the application to better meet CUNY’s needs (Appendix M).
     • Provision of training to help staff better understand the data schema for report writing.
I. Background

Completing degree requirements in a timely fashion is a crucial goal shared by students, faculty, and staff at all CUNY colleges. Degree Works, CUNY’s centrally supported academic degree audit system, is an online tool that tracks and displays the degree requirements students have completed, have in progress, and still need to meet for their degree. It informs students about pre-requisites, can help students determine which courses to register for, and allows students to explore how their completed requirements could be used if they changed or added a major or minor. Critically, Degree Works provides the data to certify students for New York State Tuition Assistance Program (TAP) eligibility and for graduation. Thus, the accuracy of Degree Works directly affects students’ financial aid and certification to graduate. Ensuring that Degree Works is completely accurate and is used to the fullest should be a priority for every CUNY college.

In May 2013, CUNY’s Central Office of Academic Affairs (OAA) issued a report calling for a plan to optimize the use of Degree Works, based on recommendations by a previous CUNY-wide study group. In September 2013, the University Dean of Undergraduate Studies established a Steering Committee and a Working Committee to develop and implement such a plan, which included leadership from OAA, CUNY’s Central Computing and Information Services (CIS), Office of the University Registrar, College Advisement Council, and Degree Works Council (Appendix A) to develop a plan to help colleges increase Degree Works usage as a means to improve access to advisement and to ensure that Degree Works provides accurate audits of student progress.

The work plan focused on two areas: first, identifying key system functionalities and ensuring that they are appropriately implemented on all campuses; and second, developing management, workflow, and training protocols to maximize effective use of Degree Works. The deliverable for the first year of work is this document, Optimizing the Use of Degree Works at CUNY: A Blueprint for Success.

II. An Important Asset for Student Success

Degree Works is a product of Ellucian and is its primary student engagement and retention product. It is currently the degree audit system at over 745 United States colleges, including University systems such as SUNY (27 colleges), University of South Carolina (8 colleges), University of Nebraska (3 colleges), Texas A&M (7 colleges), and Kent State University (8 colleges).

A. History of Degree Works Deployment at CUNY

Degree Works is a powerful system that is deployed at every undergraduate CUNY college. To date, significant resources have been invested by Central CIS and by each college to implement
and support the system and to program (called “scribe” in Degree Works lexicon) curricular requirements. CIS recently funded the re-scribing of curricular requirements for all undergraduate colleges to reflect changes necessitated by the Pathways initiative, which took effect in fall 2013. Degree Works is integrated with other key web-based resources at CUNY including the CUNY Portal, the CUNY Transfer Information and Program Planning System (TIPPS), class schedules, the E-Permit system, and CUNY’s Financial Aid Certification Tracking System (FACTS).

CUNY identified Degree Works as the optimal degree audit system after an extensive review of several such systems led by Brooklyn College and LaGuardia Community College in 1998. Degree Works was selected because it had the following attributes:

- Ease of coding for all degree requirements at the undergraduate and graduate levels
- User-friendly web-based interface
- Real-time capability
- Customizable and scalable for all colleges
- Reporting capability
- Contract included implementation services, scribed catalog requirements, extensive training, ongoing vendor support, and upgrades

Between 2002 and 2004 Degree Works was implemented as a stand-alone system at Brooklyn, LaGuardia, and Kingsborough. In 2004, as plans were underway to implement a system-wide Enterprise Resource and Planning System now known as CUNYfirst, the University decided to implement Degree Works as an Enterprise System to be deployed centrally and made available to all colleges. By spring 2006 Degree Works had been implemented at Bronx, Hostos, John Jay, and New York City College of Technology; by 2008 Baruch, Borough of Manhattan Community College, Medgar Evers, Queens College, Hunter, and York had implemented Degree Works; and by 2011, the remaining three colleges—College of Staten Island, Queensborough, and Lehman—had implemented Degree Works. Finally, SPS came up in 2012-2013 and Guttman went live in 2013-2014. By spring 2014 all undergraduate colleges had migrated to CUNYfirst, and the Degree Works system was updated and implemented across all these campuses.

B. Degree Works Features

Degree Works has a number of functions and modules. Some functions are widely used at CUNY colleges, some are not planned for use, and some have not yet been programmed and coded for CUNY-wide release. Some new functions are expected to become available in the next upgrade (version 4.1.4), such as a “What-If Transfer Audit” that would allow students and advisors to see how their courses would meet degree program requirements at other CUNY
colleges. The current functionality is robust, with the following functions now used by all CUNY colleges:

- **Academic Advisement Audit/Worksheet** – Processes students’ academic and course history information against degree requirements in the college catalog. (After CUR approval, Degree Works is updated, followed by the college catalog.)
- **What-If Audit/Worksheet** – Simulates a change of degree, major, minor, or concentration at a student’s current college. Courses are evaluated against new degree requirements by catalog year. This feature was enhanced for evaluation of student opt-in/out decisions for Pathways.
- **GPA Calculators** – Graduation, term, and advice GPA may be viewed. Advice GPA allows student to see the number of credits and grades needed to achieve the desired GPA.
- **Exceptions/Substitutions** – Selected users (authorized administrators) may process any course exceptions or substitutions that have been approved for a student.
- **Notes** – Advisors or registrars may post action items or recommendations on the audit.
- **Curriculum Planning Assistant (CPA) Reports** – Degree Works coordinators, scribers, and registrars may view aggregate data on student, advisor, and staff usage. It has been noted that additional reports would be useful, such as reports that allow for analysis of course demand based on the number of students who must fulfill particular requirements.

The FACTS financial aid audit, although not a function of Degree Works, is used by all CUNY colleges to determine students’ academic eligibility for financial aid. Degree Works data is extracted and used by the FACTS application to determine students’ financial aid eligibility each semester. Degree Works is thus a critical component of CUNY’s financial aid audit process, serving as the source of official data detailing each student’s degree progress. An accurate and reliable Degree Works system is critical to support the financial aid certification process.

Although available in the version of Degree Works currently in use at CUNY, the following functions of Degree Works are not used widely across the University. This is mainly due to a lack of confidence in the system based on lost data and errors. These represent potential areas where colleges could make better use of the system without waiting for upgrades:

- **Educational Planner** – An electronic advisement form that displays a course plan for future semesters. Several colleges lost large data sets during a migration a few years ago.
and have lost confidence in this feature. They are hesitant to use it until the new version is installed and the system upgraded.

- **Help** – Provides links to other college resources such as college catalog, schedule of classes, and campus resources. A “Report a Problem” tab is linked to the campus Helpdesk service. This feature allows the college to develop a formal reporting system. Colleges that offer these links are City, Hostos, Hunter, LaGuardia, Medgar Evers, Queensborough, and York. Other reporting methods include email, walk-in services, and reporting to advisors.

- **Look Ahead Audit** – Students can view how planned courses would be applied to their current worksheet.

- **Find** – Search tools where select users can search for students’ audits by major, class, year, degree, etc.

**C. Student Perceptions of Degree Works**

In spring 2014, under the direction of the Central Office working group, an independent consultant conducted student focus groups at BMCC, Hostos, John Jay, Lehman, and Queens to assess student feelings about Degree Works. A total of 28 students participated across the five campuses. As described in the attached report (*Appendix B*), students find Degree Works to be a valuable and user-friendly resource for navigating their academic careers. The consultant summarized students’ positive views: “Degree Works empowers students by providing them with vital information about their degree progress and options” (From, 2014). One focus group participant said:

> Basically it puts everything in one place – your general picture of what you have to take in order to complete your degree. So it's something you could log into from CUNY portal anytime you want as a student, and basically it's there for you to look at any time as a picture of where you are progress-wise—how far you've come to completing your degree, your general requirements, and what's left. Obviously there are certain things you want to confirm with your academic advisor as to when you're... going to graduate to make sure you're all complete; but it's basically a guide that helps you to track your progress.

The focus group students reported that they mainly use Degree Works to track their academic progress and to view their GPAs. Other features were used less frequently, depending on the training protocol and offerings of the college. They do have access to all of the features and can use them if they are aware of them and have been trained. Students access the system in a variety of ways (e.g., campus computer kiosks, laptops, tablets, and phones) in a variety of settings (on campus, at home, on the go), and most students find the tool user-friendly.
III. Issues and Challenges

Despite the appeal of Degree Works as evidenced by the student focus groups, there are issues and challenges that limit Degree Works’ usefulness for students and colleges. OAA gathered information about Degree Works usage in several ways:

- Student usage statistics were computed for each college.
- A survey was administered by the Degree Works Council of Degree Works coordinators (Appendix C).
- The CUNY Advisement Council (Appendix D) collected and evaluated college training plans and materials for Degree Works users.

A. Student, Faculty, and Staff Usage

Statistics on the percentage of degree-seeking students who used Degree Works at least once during the spring 2014 semester show that colleges vary in their success in getting students to use the technology for degree audits. Table 1 and Figure 1 display the total number of degree-seeking students compared to the number of unique students using Degree Works for each college. At Brooklyn, Hunter, John Jay, LaGuardia, Medgar Evers, NYCCT, Queens, and York, at least half of degree-seeking undergraduates use Degree Works. Several other colleges are approaching 50 percent, including BMCC, City, Hostos, Queensborough, and Staten Island.

However, at some colleges only a small percentage of degree-seeking students use Degree Works. For example, at Baruch only approximately 7 percent use the system. (Baruch reports that its low usage is partly due to issues with its own server and with conversion problems to the Central server.) Lehman also has low usage rates.
Table 1. Percentage of Spring 2014 Degree Students Using Degree Works for Degree Audit at Least Once: Spring 2014

<table>
<thead>
<tr>
<th>College</th>
<th>Enrollment*</th>
<th>Used Degree Works</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Baruch</td>
<td>13,873</td>
<td>911</td>
</tr>
<tr>
<td>Brooklyn</td>
<td>12,119</td>
<td>7,279</td>
</tr>
<tr>
<td>City</td>
<td>11,352</td>
<td>4,787</td>
</tr>
<tr>
<td>Hunter</td>
<td>15,092</td>
<td>10,886</td>
</tr>
<tr>
<td>John Jay</td>
<td>12,136</td>
<td>9,429</td>
</tr>
<tr>
<td>Lehman</td>
<td>8,941</td>
<td>2,515</td>
</tr>
<tr>
<td>Queens</td>
<td>14,036</td>
<td>8,306</td>
</tr>
<tr>
<td>York</td>
<td>6,928</td>
<td>4,388</td>
</tr>
<tr>
<td>Medgar Evers</td>
<td>5,747</td>
<td>4,839</td>
</tr>
<tr>
<td>NYCCT</td>
<td>14,759</td>
<td>8,406</td>
</tr>
<tr>
<td>Staten Island</td>
<td>12,264</td>
<td>5,412</td>
</tr>
<tr>
<td><strong>Senior College Total/Avg.</strong></td>
<td><strong>127,247</strong></td>
<td><strong>67,158</strong></td>
</tr>
<tr>
<td>BMCC</td>
<td>22,606</td>
<td>11,208</td>
</tr>
<tr>
<td>Bronx</td>
<td>9,899</td>
<td>2,898</td>
</tr>
<tr>
<td>Guttman</td>
<td>436</td>
<td>31</td>
</tr>
<tr>
<td>Hostos</td>
<td>6,418</td>
<td>2,783</td>
</tr>
<tr>
<td>Kingsborough</td>
<td>13,281</td>
<td>4,578</td>
</tr>
<tr>
<td>LaGuardia</td>
<td>16,119</td>
<td>12,788</td>
</tr>
<tr>
<td>Queensborough</td>
<td>13,614</td>
<td>5,605</td>
</tr>
<tr>
<td><strong>Community College Total/Avg.</strong></td>
<td><strong>82,373</strong></td>
<td><strong>39,891</strong></td>
</tr>
<tr>
<td><strong>CUNY Avg.</strong></td>
<td><strong>209,620</strong></td>
<td><strong>107,049</strong></td>
</tr>
</tbody>
</table>

**DW Usage is computed as the percentage of undergraduate degree-seeking students (associate and baccalaureate) enrolled in a given term who logged in to their college’s Degree Works system to use the audit function at least once during the term.**
Usage statistics for advisors and registrars vary substantially across colleges, and usage relative to the number of advisors and representatives from the campus registrar’s offices are difficult to compute. Anecdotal evidence suggests that there is room for growth among these populations. A majority of Degree Works coordinators reported a lack of buy-in from faculty and in some instances from advisors who reported concerns about data integrity. Given that the usage data is calculated on the number of degree-seeking students who logged in at least one time during the term, it does not provide insight into whether users returned to the system. It should be noted that if data integrity is an issue on the campus, users may not return for a second time.

B. Degree Works Staffing

A lack of adequate staff to support the Degree Works operation on campus was identified in the survey of Degree Works coordinators as the greatest challenge related to system maintenance and, as a result, data integrity and confidence in the system. There is great variation in Degree Works staffing models across the campuses, in terms of which offices house Degree Works staff, the number of full- and part-time Degree Works staff members per campus, and the percentage of time each staff member dedicates to Degree Works tasks. Overall, most staff with Degree Works responsibilities reside in the Registrar’s Office, but at a few campuses they are affiliated with their college’s Information Technology, Enrollment Management, or Advisement offices.
All CUNY colleges (except Guttman Community College) have at minimum one full-time staff member with some Degree Works responsibilities (see Table 2). Guttman has four part-time staff members with Degree Works responsibilities. Most colleges have one other full- or part-time person assisting with Degree Works tasks, and a few colleges have additional staff with some responsibility for Degree Works, with total staff counts ranging from one to five.

### Human Resources Dedicated to Managing, Scribing, and Maintaining Degree Works

<table>
<thead>
<tr>
<th>College</th>
<th>Headcount</th>
<th>FTEs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FT</td>
<td>PT</td>
</tr>
<tr>
<td>Baruch</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Brooklyn</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>City</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Hunter</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>John Jay</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Lehman</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Medgar Evers</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>NYCCT</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Queens</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>School of Professional Studies</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Staten Island</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>York</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td><strong>Senior College Avg.</strong></td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>BMCC</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Bronx</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Guttman</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Hostos</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Kingsborough</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>LaGuardia</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Queensborough</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td><strong>Community College Avg.</strong></td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>University Average</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

**Methodological note:** FTEs were computed by summing the percentage of time dedicated to Degree Works activities across all personnel with some Degree Works responsibility, as reported by colleges in response to the 2013-14 survey of Degree Works coordinators. Where ranges were provided, the maximum percentage was included in the sum resulting in a liberal estimate of the FTEs dedicated to Degree Works.

**Note:** For this analysis, general degree audit responsibilities are not counted as Degree Works responsibilities.
Very few Degree Works coordinators report having enough time to give Degree Works the focus and attention it requires. At nearly every college, both full- and part-time Degree Works staff members have significant non-Degree Works advising and registrar responsibilities as well. (Brooklyn College had a full-time dedicated Degree Works coordinator, but that staff member has since been assigned additional registrar responsibilities.) All others holding the title of Degree Works coordinator dedicate a percentage of their time to Degree Works, and most other full- and part-time staff members have 50 percent or less of their time dedicated to Degree Works. For example, the five full-time staff members with Degree Works responsibilities at BMCC each spend 25 percent or less of their time on Degree Works. Together, their estimated dedicated time to Degree Works adds up to less than one full-time equivalent (FTE) staff member.

When asked, “How many employees do you believe are necessary to support Degree Works efforts in order to maintain updates, review issues, train users, and market the application?” the Degree Works coordinators of all campuses recommended there be a minimum of three full-time staff persons assigned 100 percent of their time, in addition to part-time support staff. Specific responsibilities of these key staff positions are detailed in the Solutions: Blueprint, Data Integrity section of this report.
C. Data Accuracy

As noted above, the accuracy of the data that underlies the system is of the utmost importance. Degree Works must be continually scribed with up-to-date academic policies and curricular requirements. Furthermore, the system depends on having accurate data that has been migrated from other systems such as CUNYfirst and from the University Admissions Processing Center (UAPC). In many cases, students receive waivers or substitutions that must be manually recorded in the system. Most of the work related to maintaining the system takes place at the campus level.

To provide context related to the scope of work needed for Degree Works maintenance, one campus reported that over a period of three semesters (Fall 2013, Spring 2014, Fall 2014), there were approximately 1,375 changes made to the scribed degree requirements based on student, advisor, and faculty requests. Also at this campus over this time period, there were more than 3,000 exemptions, substitutions, and waivers processed in Degree Works and more than 1,000 updates to accommodate student opt-in and opt-out of Pathways. Another campus reported more than 1,000 issues due to data conversion errors during migration to CUNYfirst over this time period, as well as more than 4,500 actions taken to accommodate Pathways appeals, Pathways opt-in, and Pathways opt-out. Certainly this was an active time period, as the colleges transitioned both to the new Pathways curriculum and to CUNYfirst.

In some cases issues that arise related to Degree Works are referred by the campuses to CUNY’s Central Computing and Information Services (CIS) department. Over a fourteen-month time period (from August 2013 to November 2014), colleges submitted 674 tickets to the CIS Helpdesk on Degree Works and FACTS issues. Only a few administrators from each campus are able to submit a ticket to CIS. These tickets represent problems identified at the colleges that were not easily resolvable at the campus level. Ten colleges submitted fewer than 25 tickets over this time period, while some colleges submitted a larger number. For example, City College and NYCCT submitted 117 and 89 tickets, respectively. Such tickets were frequently submitted due to user access problems. Other issues identified by the campuses were global in nature, applying to many students. For example, campuses submitted tickets when incorrect TAP rules were being applied to a student population (e.g., TAP rules for bachelor’s students were applied to associate students).

It is crucial that Degree Works contain accurate data due to the linkage between Degree Works and FACTS. As indicated above, courses may show in a student’s Degree Works account as not contributing toward the degree for many reasons, including:

- Courses are not coded as meeting degree requirements because they have not been approved by the Board of Trustees. This situation frequently arises when the approved degree program does not list prerequisite or corequisite courses that students must take.
• Courses have recently been submitted for approval but have not yet been scribed as meeting requirements in the system.
• Courses that have been approved as experimental courses, but have not been submitted to the Board of Trustees and have not been scribed.
• Courses may be recommended by an advisor or department chair, but must be processed as substitutes in Degree Works.
• Lack of clarity about degree requirements. In some cases there are inconsistent requirements listed in advisement worksheets, the catalog, and Degree Works.
• Transfer courses may be incorrectly applied in the audit.
• Basic skills placement has changed and is not correctly included in the audit. As a result basic skills courses must be processed as meeting the skills requirements.

When student course taking does not match requirements as listed in Degree Works, the FACTS application will flag the course as ineligible for financial aid. Campus staff must then enter a manual correction in the student record (either in Degree Works or in FACTS) in order to ensure TAP coverage. From August 2013 to November 2014, there were 51,573 exemptions entered on student records in Degree Works. Additionally, between January 2014 and November 2014 there were 20,343 waivers processed in the FACTS application. There are several factors that contribute to having exceptions, substitutions or waivers processed in Degree Works and FACTS. These include the following:
• A course is not coded in the audit as meeting a requirement. It was not part of the degree program approved by the Board of Trustees. A good example could be prerequisites or corequisites that are not listed as meeting degree requirements. Students must take these courses and may need to get processed as meeting a requirement if they receive State aid.
• Courses have been submitted for approval by the Board of Trustees but as are not approved and not scribed. Sometimes, due to the large number of blocks that must get updated, courses are pending to get scribed.
• A course is approved as an experimental course, but not submitted to the Board of Trustees and not scribed.
• A course recommended by an advisor, needs to get processed as a substitute; this usually occurs during review for graduation. Sometimes, there are different requirements coded in advisement worksheets vs. the course catalog vs. Degree Works.
• A course that is required is not offered in a term, and it is the only requirement needed.
• A department chair approves a course for an individual student due to a special circumstance. Sometimes advisors and department chairs agree on a substitute, and the documentation is shared between them but is not shared with the registrar and the scribes.
• A course has been scribed but for some reason the audit algorithm is not applying it correctly.
• A transfer course that should meet the requirements is not getting applied correctly.
• Basic skills placement has changed or was not coded correctly in Degree Works and other developmental skills courses must get processed as meeting the skills requirements.
• A course is flagged as not eligible in FACTS and needs to get processed as a waiver in FACTS because Degree Works is not applying the course to the requirement.
• A course applied in Degree Works is not displaying as eligible in FACTS. This would require a waiver processed in FACTS.
• Complex requirements can be difficult or not possible to code in Degree Works.
• The audit consistently displays data inaccurately especially with converted data from SIMS or miscoded in CUNYfirst.

D. System Maintenance and Business Practices

College advisors and Degree Works coordinators report that there are not always clear communication channels or procedures for reporting errors or operational malfunctions or implementing systematic workflows to update data. Degree Works coordinators and advisors report that users (faculty, staff, students) often do not let them know when there are problems, although they need specific information about the problem in order to review, fix, and update the issue. Users, however, report that they do try to report inaccuracies, but are often not responded to or that problems take too long to get resolved. Inaccuracies and errors can be anything from multiple records for one student, failures in transferring courses from one college to another, courses without proper degree requirement designations, or any of a wide variety of problems that produce inaccurate records of student progress. This is frustrating for the student, the advisor, and the faculty member trying to assist the student in tracking progress toward degree completion.

Further, the skill level and focused attention required to maintain Degree Works are often misunderstood and underestimated. Curricular requirements are constantly evolving and can be quite complex. For example, a single course change might impact general education requirements, overlay requirements, and major requirements. Prerequisite rules, contingencies, and other curricular complexities are common. Further, as noted by one Degree Works coordinator, “There are often four versions of a single curriculum: the bulletin, website, academic program worksheets, and departmental brochures.” When asked about the key issues impeding usage of Degree Works, ten college Degree Works
coordinators reported that the system is difficult to maintain due to lack of staff or to curricular complexity.

The ongoing adaptation to CUNYfirst presents added complexity, as staff adjusts to new financial, personnel, and course scheduling systems. Delays in the transfer evaluation process may also impact the accuracy of Degree Works, and as a result of existing practices that transcend Degree Works, transfer courses may not always display correctly on the audit/worksheets. All transfer courses must get posted as their course equivalents. In cases where transfer courses are posted as general electives, these courses must be set up as “repeatable” in Degree Works in order to allow all of the courses to count for the degree. For example, if several courses transfer as “History elective,” the system must be set up to ensure that all of these courses may count toward the degree.

Without clear business practices for maintaining Degree Works and for identifying and addressing problems, some data inaccuracies will exist and/or will be slow to be corrected. This creates a vicious circle; if users are unwilling to rely on the system, there will be fewer users reporting inaccuracies and needed updates, which will in fact compromise the data quality.

As noted earlier, the FACTS system is completely reliant on Degree Works and it is equally complex in terms of maintenance challenges, requiring as much time, attention, and staffing as does Degree Works. Errors have a potentially damaging impact on enrollment management, course compliance, and scheduling as it relates to financial aid certification. New federal regulations that began in fall 2013 require that financial aid must be disbursed and funds awarded to students within ten days of the start of classes. As a result of these new requirements.

CUNY had to change the close dates in its systems to the seventh business day after classes start to align with the federal financial aid certification deadlines. While it is possible to make changes to student financial aid certification files after these dates, it must be done through an appeal process on a case-by-case basis. Students need to be able to enroll in the appropriate courses that are financial aid eligible for their degree and have enough credits to qualify for financial aid.

These changes in the federal regulations have placed a burden on TAP certification officers and the FACTS coordinators, especially with the new timeline and the move to the 7th from the 21st day after classes begin to determine financial aid eligibility, submit files, and disburse funds to students. Also under new and additional pressure are the academic advisement offices. Advisors play a significant role in the TAP certification process, as it is the advisors who assess students to
ensure that they are registering for classes that are TAP eligible. Advisors also play a significant role in the TAP waiver/appeal process. All of these processes depend on accurate, functioning, and aligned Degree Works and FACTS systems.

It should be noted that there is a TAP Certification Task Force that is addressing these issues and making recommendations for admission deadlines and the technical and staffing support needed for these functions. It is important to note that the Degree Works Council, the Advisement Council, and the TAP Certification Task Force are all in agreement that the marriage between financial aid eligibility, academic course requirements, and Degree Works needs attention from the top down across CUNY. This is seen by all parties as a big, and growing, issue that needs immediate attention by CUNY and campus executive leadership.

E. Training of Students, Faculty, and Staff

Degree Works training plans and materials for students, faculty, and staff vary widely from campus to campus, and not all campuses have a comprehensive training plan. In fact, three campuses reported not having any training plan or training materials. Even some colleges that do have training materials do not widely promote or use them.

The students in the focus groups had very different experiences in learning about Degree Works. It seems some students do not realize it exists, and that exposure to Degree Works is uneven not only across CUNY but also within colleges. This suggests that student advisement and orientation structures could be more consistently developed to train students on Degree Works. It was noted that in some cases advisors access students’ Degree Works accounts during in-person advisement sessions, but advisors do not always tell students that they can also access the system themselves. Students suggested there be repeated opportunities for students to be exposed to and learn about Degree Works. In the section that follows, training and promotional programs in campuses that have been successful in reaching students are presented. LaGuardia has had remarkable success with promoting Degree Works and training students and faculty to use it, a program that starts with strong support from the college president.

One student lamented the lack of awareness of Degree Works as a resource:

*I would definitely like to use [Degree Works], and I wish that I would have known about it sooner. I think that maybe this is something especially for incoming first semester students that it should be, you know, promoted to more so that they know that they have this resource.*

Another student suggested that training on Degree Works be mandatory:

*I think it’s encouraged, but I think it also should be mandatory, like setting up an email account is mandatory as a student. I think knowing how to go into Degree Works should be mandatory too, because there are a lot of students who don’t know about their curriculum and what classes they’ll*
have to take, and a lot of students try to change their major without knowing how it will affect their current degree progress. They think everything will just transfer over. And I think if they had access to Degree Works it will help them know more about what they’re doing in college.

IV. Solutions: A Blueprint for Success

There is great potential for colleges to use Degree Works more effectively, if campus executive leadership ensures adequate staffing and the development of effective business practices for ongoing maintenance and updating.

The 2013/14 PMP goals and targets included a target to increase students’ usage of Degree Works as a mechanism to improve access to advisement. The following describes the additional key steps that campus leadership can take to optimize Degree Works: a) Improve data integrity, b) Market and promote Degree Works and c) Commit to training.

A. Improve Data Integrity

Staffing and Training

As described above, colleges may have insufficient staffing levels of Degree Works professionals. The work of Degree Works staff is complex and requires a sophisticated level of skill and understanding of coding, curriculum, financial aid, admissions, and registration processes on campus. A functional knowledge of CUNYfirst, FACTS, and the flow of data from one system to another is a requisite skill set of Degree Works staff, as often issues that present as an error or problem in Degree Works may originate in CUNYfirst or be related to a data migration instance between any of the three systems. Staff must also keep current with changes in Degree Works (new releases and updates), college curricular requirements, and college procedures. Colleges need to offer consistent training and development for Degree Work staff, both new and senior.

Based on a survey of the Degree Works Council and registrars, as well as follow-up discussions, the following staff positions were identified for the colleges to adequately support the campus Degree Works operation. Additional staff are also required at Central CIS to support these applications and respond in a timely manner to issues and to correct defects, install upgrades and new enhancements, and develop reports.

The division of labor and the breadth and depth of the responsibilities are presented in the appendix for three key positions, or areas of responsibility, of a well-resourced advisement/Degree Works operation that handles business workflow, training, scribing, systems alignment, and curriculum changes and policy (Appendix N: Degree Works Administration and Staffing).
To clarify, scribing is the process and programming language used to code academic policies and degree requirements. These rules are used in conjunction with data coded in the other Degree Works applications—SureCode and Transit. The web audit algorithm uses data from these three applications to display requirements in the web application.

Campus staff must be trained on this programming logic and on the interrelationship between data from these three applications and CUNYfirst. They must translate the academic policies and degree requirements into Degree Works and determine which scribe rules to code to have the audit algorithm display requirements correctly in the web audit.

The scribing is first done on a test environment, and after the coded rules are tested with different students’ cases, the scribed blocks and tables are migrated into the production instance.

The maintenance of Degree Works and FACTS also requires technical staff at Central CIS responsible for developing and updating the extract programs, setting up and updating the PC applications, maintaining the production environments, and training the colleges’ coordinators and scribes on how to code their requirements. In addition, the production support staff reviews Customer Relationship Management (CRM) tickets and resolves issues. Currently, CIS has a limited number of staff resources assigned to these duties, and these staff members have other programs they are responsible for supporting and maintaining. The Central CIS unit responsible for Degree Works implementation and maintenance proposes the following staffing recommendations below. They currently have only four full-time staff to manage and address all Degree Works and FACTS issues for the University. Five additional roles are recommended:

**Recommended Additional Staffing for Central CIS**

| Application Development – System Analyst and Programmer - DGW | 1 |
| Application Development Programmer - FACTS | 1 |
| Report Developer - DGW and FACTS | 1 |
| Application and Services Delivery Support- DGW and FACTS | 2 |

**Business Practices and Workflow for Maintenance**

Campuses must have clear processes and workflows for reporting and correcting errors and for routine maintenance. A system must be in place for Degree Works users to report errors and receive timely responses. Campus advisement staff, as primary users, is often the staff that identifies and reports errors. However, on some campuses students can also report errors when they are uncovered, as is the case at Lehman.
It is also essential to establish effective structures for ongoing communication, collaboration, and facilitation between Degree Works and FACTS staff—as well as with advisors and with staff responsible for curricular updates and the Chancellor’s University Report (CUR). It is recommended that management of the Degree Works application reside in the Registrar’s Office. Updates first require approval through the CUR at the University level, and therefore clear communication between Degree Works scribers and the campus staff that handle curricular matters and the CUR is a critical component of a sound workflow and organizational structure (Appendix E: Proposed Organizational Chart for Degree Works Management).

All program changes, new courses, and modifications to existing courses must be entered into the CUR in order to be approved by the CUNY Board of Trustees. The CUR is also used by various campus personnel to track changes in the curriculum. The CUR program modification form has a side-by-side comparison of current versus new requirements. This makes it clear to any reader (e.g., a New York State Department of Education program reviewer, a CUNY Central Office administrator, a campus registrar, or a Degree Works scriber) what the changes are. For new courses and modifications to existing courses there are template forms that capture course details such as title, credits, description, etc. These forms have recently been modified to capture all information required by a Degree Works scriber to make coding easier (Appendix F: CUR New Course Form and CUR Course Change Form).

Recommended Approaches and Models: Lehman College

Lehman College is an example of a CUNY college that has developed clear processes and workflows. Lehman College created a Degree Works/FACTS support center in 2012. The center, staffed by one full-time staff member (TAP coordinator) as well as three college assistants, is open Monday to Friday 9:30am to 5:00pm and two days a week until 6:30 PM. The deputy registrar and TAP certification officer both assist daily with the escalation protocol—the process for reporting and fixing errors—but are not permanently situated in the center as they have other registrar responsibilities.

The Degree Works/FACTS support center has an escalation protocol for addressing problems and technical challenges identified by students, faculty, and staff. The five-level escalation protocol, documented in writing (Appendix G: Lehman Support Center Escalation Protocol), is a clear step-by-step process for analyzing issues and finding solutions. Training for all staff includes understanding Degree Works, FACTS, and HESC (Higher Education Services Corporation) data, and creating and logging tickets.

Lehman also developed an Electronic Student Referral Process (e-SRP) service, which is a customized referral and tracking system. Features include: issue tracking, time stamp, resolution response time, case disposition, email notification to users, and reports on services. E-SRP was piloted towards the end of the spring 2014 semester. Additional enhancements were added in late
summer, and the second phase of the pilot continues in fall 2014 (Appendix H: Lehman e-SRP Training Document). Lehman chose to put their systems in place first before mounting major training and marketing campaigns on campus, thus their current student usage data is low. However, they recently completed their pilots on the spring and fall of 2014, so will be ready to engage in the next step of student engagement with a strategic approach to promoting Degree Works and training users.

Lehman’s approach to Degree Works and FACTS management serves as a good model, as it brings together the key elements needed to ensure data integrity: a well-organized operation under the Registrar’s Office that is staffed with trained personnel; a clearly defined workflow and protocol for reporting and correcting data errors and addressing the variety of issues that arise; a feedback and tracking mechanism; and finally, a structure that allows for ongoing communication and collaboration between the academic advisement advisors, admissions and transfer credit evaluators, departmental faculty, and enrollment management staff to review and resolve issues.

Web-based Helpdesk Software System

The colleges have tried to develop mechanisms to track and resolve Degree Works issues. Most use email and/or the campus Customer Relationship Management (CRM) system plus a spreadsheet—which is labor intensive, time consuming, and does not provide data or status reports in an efficient manner. Weak processes delay response and resolution and perpetuate lack of trust in Degree Works data. A tracking system is needed across all campuses to store and retrieve information and data on Degree Works and FACTS issues. While some colleges use an Excel spreadsheet, it is not possible to extract data from these sheets. Data is not coded each term in a standardized manner. Most of the colleges do not have a system to collect data other than responding to a phone call or emails. Even for the few colleges that use the “Report A Problem” form on Degree Works, there is no electronic process to extract or summarize data.

CUNYfirst colleges use their CRM/help desk system, but this system has limitations and does not have the functionality needed to effectively manage Degree Works cases. Lehman College is the only college that has implemented an integrated web-based referral system.

It is recommended that Central CIS implement an enterprise customer support system, beginning with updating the CIS–CRM Helpdesk system, and implement this model across all campuses. Currently, CIS is analyzing the requirements for an integrated system and has advised that the new system include the functions listed below:

- User-friendly system accessible from a tab on the Audit, CUNY Portal, and CUNYfirst.
- Issues Tracking System with customized fields (e.g., issues, resolution, date stamped, submitter, status, action triggers for notification, and a section to provide feedback on curricula changes required in Degree Works or regulation updates required in FACTS).
- Defined Escalation Protocol and Status.
- Automated communication and notification—email, social media, letters, etc., on status of the ticket and resolution or next steps.
- Workflow automations.
- Upload and generate reports.
- Analytical tools and reporting.
- Knowledge base with online help and training tutorials.
- Set-up auto-responses to common questions with triggers.
- Integration with other systems such as CRM, Track-It, CUNY Mobile App, etc.
- Tools to measure quality of services—issues, response time, satisfaction survey, etc.

Campuses need not wait for a Central CIS CRM Helpdesk system to be rolled out. There are steps a campus can take right away to improve local workflow and maintenance procedures. Listed below are recommended interim solutions until an enterprise customer-support system Web-based Helpdesk system can be implemented.

- Add to each campus Degree Works instance a Help Tab; post the Report a Problem Form. This form can be linked to each campus’s existing IT Helpdesk system.
- Develop a document on escalation protocols.
- Implement Google Excel document for faculty, advisors, and administrators to report and track issues and resolutions.

Under the leadership of the CIS IT service delivery director, a committee has been convened to identify the requirements to improve the current CRM system and propose an enterprise customer support system. The functions in the Lehman Helpdesk system will be incorporated in this analysis. A preliminary review of the requirements identified by the committee are comparable with the functions proposed that exist in the Lehman model. This work is in progress, and this phase of the project will be completed by the end of 2014. To date, CIS is currently reviewing different systems. They have met with several vendors, reviewed their products, and are evaluating them to determine if these systems meet CIS requirements. This review is underway but as of yet a system has not been selected.

B. Market and Promote Degree Works

Degree Works coordinators and advisors identified “campus perception of the product” as a pressing issue that impedes use of Degree Works. Results of the student focus groups also support this. Many students indicated that they wish they had known about Degree Works sooner in their academic career. Further, students who do use Degree Works primarily use it to track their degree progress and view their GPAs, but the majority was unaware of other features such as the Educational Planner and the Look Ahead Audit/Worksheets.
Much of this could be reversed by educating faculty, students, and staff about Degree Works, in tandem with improving data integrity, as described above. It is recommended that CUNY and the colleges undertake a campaign to correct misperceptions of Degree Works, promote its benefits, and emphasize that CUNY has made an institutional commitment to using and supporting Degree Works.

CUNY can, and should, be making better use of Hobson’s Retain Software University-wide. This web-based early alert and student retention CRM system can help colleges coordinate all communications with students. It can be used to promote usage of Degree Works and FACTS and its related training materials.

There are many straightforward ways to begin. Campuses could leverage resources (promotional/educational materials) already developed at other CUNY colleges. Degree Works information could be incorporated into faculty and student orientations and included in emails, flyers, posters, newsletters, etc.

Ensuring that advisors and faculty are knowledgeable about Degree Works is very important too. Student peer leaders can also serve as effective ambassadors and can show fellow students how Degree Works can be used to track degree progress and clarify requirements.

Recommended Approaches and Models: LaGuardia Community College

Seventy-three percent of LaGuardia’s student body used Degree Works (known as Degree Audit at LaGuardia) in spring 2014. This success is largely attributed to LaGuardia’s comprehensive approach to promoting the system.

First, Degree Works at LaGuardia is built into the freshman orientation experience; new students are introduced to Degree Works as part of their first contact with the college, upon acceptance. First-time college enrollees learn about Degree Audit at new student advisement and registration events. Students are encouraged to log in and familiarize themselves as soon as they register for classes. See the LaGuardia online tutorials about Degree Audit: http://laguardia.edu/degreeaudit/.

Second, Degree Works hands-on training has been integrated into LaGuardia’s new freshman seminar. Instructors introduce students to the audit (as part of the faculty hour), and peer mentors teach students about specific functions (as part of the studio hour).

Third, advisors repeatedly emphasize that Degree Audit, in conjunction with the CUNYfirst record, is the primary source of information about students’ degree progress. It is presented as a
tool of empowerment to track credits and monitor GPAs. The online publication *Student News* regularly refers to Degree Works as a critical component of advisement and registration.

Fourth, LaGuardia makes Degree Works easily accessible in several ways, including via LaGuardia’s Student portal “My LaGuardia.” Also, students are asked to review their Degree Audit before meeting with an advisor, which they can do at the computers in the Student Advising Services Office. Peer mentors are there to help too. Many students review Degree Audit on their smartphones while waiting to see an advisor.

LaGuardia is also deliberate about educating faculty, new advisors, and student advising services peer mentors about Degree Works. Student Affairs provides a hands-on workshop each semester for advisors. Faculty and peer mentors responsible for conducting the new freshman seminar participate in their own Degree Audit hands-on training in the *New to College Seminar* and *Peer Mentor Training*.

C. Commit to Training: Students, Faculty, and Staff (Advisors, Scribers, Registrars)

Promoting Degree Works is inextricably linked to providing Degree Works training and educating users. During the 2013-2014 academic year, the CUNY-wide Academic Advising Council asked all colleges to provide information about their Degree Works training plans and materials, in order to understand the landscape and share best practices. A password protected webpage was developed to compile this information (please view the web link provided here: [http://advising.qc.cuny.edu/at](http://advising.qc.cuny.edu/at) Username: advising / Password: at2014).

Colleges that did not have training plans were asked to develop one. Of the twenty-one colleges/programs that use Degree Works, seventeen provided training plans and materials that ranged from one-page “how-to” handouts to comprehensive user guides.

Training for Students

Fourteen (82%) of the colleges that submitted training plans have current structures in place to train students. Students are typically trained upon entry or during the first semester and then encouraged to print/review their audit any time they seek advisement.

In most cases, the Academic Advising Office at each college is responsible for training students. Training materials are available in print and electronic form at most colleges. Select user-friendly materials are presented below.

- Bronx Community College’s quick-use reference (*Appendix I: BCC Degree Works Reference Sheet*)
- LaGuardia’s Degree Works individual components self-service guides [http://www.laguardia.edu/degreeaudit/](http://www.laguardia.edu/degreeaudit/)
Training for Faculty and Staff

All colleges that submitted a training plan have training available for staff (94%), and most have training opportunities for faculty (76%). Training for new faculty is typically linked to the faculty orientation program, whereas new staff members tend to be trained on an ongoing/ad-hoc basis. Training is usually a collaborative effort among advising, the Registrar’s Office, and/or Degree Works staff members. Two exemplary Degree Works training materials targeted to faculty and staff members include:

- Hunter College’s introductory slide show (http://hunter.cuny.edu/dig)
- Lehman College’s user guide for faculty and staff (http://advising.qc.cuny.edu/at/pdf/DegreeWorks%20User%20Guide.pdf)

Recommended Approaches and Models: John Jay College

John Jay’s plan has resulted in an increase in student use of Degree Works from 50% in fall 2013 to over 77% by spring 2014 (see below). Separately, BMCC’s training plan is also presented as a model (Appendix J: BMCC Degree Works Training Plan).

Training Recommendations

A successful training plan includes identified goals, a timeline, a schedule that accommodates various constituents, an outreach process, and training materials. The following are recommended to improve training opportunities and programs across CUNY:

- Introduce a yearly CUNY-wide training program for campus trainers on how to use Degree Works features that are underutilized or have been updated; discuss best practices; review case studies/issues. This training could also happen through various monthly council meetings: Degree Works Council, Academic Advising Council, Financial Aid, and Council of Registrars.
- Each college should prepare an annual training plan and schedule that outlines which offices and staff members are responsible for training various constituents.
- CUNY Central should support the development of updated Degree Works training/use strategies materials targeted for faculty, staff, advisors, and students as needed and make accessible to the University community.
- A “how-to” Degree Works video that can be used across the University (current materials are stagnant).

- Interactive online training modules to demonstrate each Degree Works component, similar in content to LaGuardia’s modules of self-service guides that break the process down into one-page instructional units [http://www.laguardia.edu/degreeaudit/](http://www.laguardia.edu/degreeaudit/).
John Jay Degree Works Training Plan

Goals for Degree Works Training

1. Familiarize college community with Degree Works tool and function.
   - How to access and read the degree audit.
   - How to use features of the degree audit such as: “What If”, “Look Ahead”, “Educational Planner”, etc.
2. Provide Degree Works users with resources on who to contact for assistance with using the tool and how to report concerns regarding the degree audit.

Fall 2014 and Spring 2015 Training Plan & Schedule

Students
The Academic Advisement Center and the Registrar’s office will collaborate on training and reinforcing use of DGW among students based on their academic standing:

- Freshmen (0-29 crs) will attend group advising sessions (October - December 2014 and March – May 2015) where they will be required to access and print their degree audit prior to attending the session and then be introduced to understanding the components of the degree audit.
- Sophomores (30-59 crs) will receive an email communication (mid October 2014 and mid-March 2015) with a handout on how to access and use Degree Works features and resources on how to re-declare, change or add a major/minor.
- Juniors (60-89 crd) will be invited to group academic planning sessions led by Advisors and Registrar's Staff (last two weeks of September 2014 and last two weeks of February 2015) to assess if they’re on-track for graduation. Registrar’s staff will use Degree Works to show students what they look for in certifying students for graduation. Advisors will discuss effective use of Degree Works “Planner” tab to outline remaining requirements that will lead to successful completion of degree requirements.
- Seniors (90-120 crds) will receive an email communication (mid October 2014 and mid-March 2015) with a handout on how to access and use Degree Works features and provide link to complete the online “Apply for Graduation” form. This communication will also include tips on how to ensure that all degree requirements will be met by their intended graduation term.

Staff
The Registrar’s Staff will provide training for advisors and other staff who use Degree Works to update them on current changes to the program. This training will take place in September 2014 and the areas to be covered include: “Process New”, understanding exceptions in Degree Works, change of catalog year, effective use of the Educational Planner, and reporting issues with Degree Works.
D. Establish Clear, Well-coordinated Processes for Managing Curricula Updates

Life Cycle of Curricular Changes – From Idea to Scribed Requirement

A college’s courses and academic programs are the manifestation of its intellectual life as well as the source of its financial strength. They are dynamic and constantly changing. The curricular change process involves many constituents from faculty members who make the decisions, admissions officers who recruit new students, administrators who update catalog copy, the Provost Office staff person who submits items to the Chancellor’s University Report, and the registrar who does degree audits based upon criteria that scribers have updated in Degree Works. The accurate recording of updates to the campus’s offerings requires constant cross-divisional cooperation and communication and the establishment of college-wide processes and timelines that ensure the complete, expeditious, and accurate flow of curricular information to all parties (Appendix K: Proposed CUNYfirst and Degree Works Curriculum Change Workflow Process).

Colleges are advised to consider the timeline for all governance approvals, both local and central, as well as regulatory approvals for new programs, revisions to existing programs, new courses, and revisions to existing courses that are required prior to these actions being considered official and prior to scribers being permitted to make changes in Degree Works.

In particular, new programs and substantial changes to existing programs, which require approval of the New York State Department of Education, need a significant amount of lead time before they may be scribed into Degree Works. While these approvals are outside the scope of Degree Works, they play an important role in determining the effective date of registration and changes, which is a key piece of data for the scribers. This will require faculty governance groups and liaisons to the Central administration on matters related to new degree program proposals and the Chancellor’s University Report to meet with Degree Works staff to develop a realistic timeline for all the sequential approvals. Queens College recently created an excellent internal template for such a timeline (Appendix L: Queens College’s CUR Timetable and Template).

Here are some suggestions to improve campus communication and cooperation:

- Degree Works senior managers should serve as a resource or become non-voting members of the College-wide Curriculum Committee. They require current AND granular knowledge of the curriculum and the intentions of the departments who present new courses and programs for approval.
- Campus Curriculum Committee chair or administrative staff should complete and submit a Degree Works Update Form to the Degree Works coordinators and/or the master scriber. There needs to be a mechanism for logging in any Degree Works change. All programmatic
Additional development of Degree Works, particularly implementation of the upgrade which is now available, could make an impact on student success.

The “What-If Transfer Audit” feature could be used to analyze student eligibility for reverse transfer. Current efforts to do reverse transfer are extremely time intensive because the colleges must rely on a manual review and analysis of student records. The “What-If Transfer Audit” could help automate reverse transfer, yielding additional associate degrees awarded and higher graduation rates for the community colleges.

CUNY could also leverage the reporting capabilities of the software to more actively track student progress toward the degree.

Changes need to be mapped out clearly and accurately with all relevant information so they can be scribed correctly. A form is one tool; an academic administrator could also be assigned to track changes and provide accurate documentation to the Degree Works coordinators.

- All new curricula changes coded in Degree Works should be effective for the following academic year. Faculty often assume once a course or program is approved it is available to be offered immediately. It needs to be scribed, and the course catalog in its many forms needs to be updated and processed across systems. A campus timeline aligned with the CUR timeline is an effective tool for managing this process.

- Colleges should develop an internal timeline and template for the CUR process.

V. Next Steps: Taking Action

With robust utilization, Degree Works can be a key academic planning and career tool for student success by enhancing academic advisement services. The system may also enhance University-wide planning, particularly related to course demand and availability. Administrative efficiency can be greatly enhanced, as students are able to address basic questions and self-advisement through use of the system. Benefits of implementing the upgraded version of the software, as well as specific action steps, are presented below.

A. Degree Works 4.1.4 Upgrade and Enhancements

Additional development of Degree Works, particularly implementation of the 4.1.4 upgrade that is now available, could make an impact on student success. For example, the next upgrade will include the “What-If Transfer Audit” feature, which will allow students to see how their coursework would be applied toward degree programs at other CUNY institutions. Currently the system only provides degree audits at the student’s home institution. As student transfer is extremely common within the CUNY system, this feature could be especially useful for students who want to plan for future transfer to another CUNY college.

The “What-If Transfer Audit” feature could be used to analyze student eligibility for reverse transfer. Reverse transfer is a process whereby students who transfer from a community college
without associate degrees, but who then meet the requirements for associate degrees while working toward their baccalaureate degrees, will be awarded their associate degrees from the home community college. Current efforts to do reverse transfer are extremely time intensive because the colleges must rely on a manual review and analysis of student records. The “What-If Transfer Audit” could help automate reverse transfer, yielding additional associate degrees awarded and higher graduation rates for the community colleges.

Furthermore, CUNY could leverage the reporting capabilities of the software to more actively track student progress toward the degree. With some frequency students enroll in courses that do not progress them toward degree requirements. The Office of Academic Affairs has reviewed transcripts where students have accumulated more than 100 credits at a community college. In other cases, transcript review has shown that a student has completed all degree requirements, but the degree has not been posted to the student record, perhaps because the student did not file an “Intent To Graduate” form. With robust reporting from the Degree Works system, advisors and other staff could more actively address these issues related to student progress toward the degree.

**B. Recommendations**

There are a number of concrete steps CUNY and the colleges can take to improve and enhance their advisement technologies and increase usage of Degree Works by students, faculty, and staff.

- Each campus must have clear processes and workflows for reporting and correcting errors and for routine maintenance. A system must be in place for Degree Works users to report errors and receive timely responses.
- Each campus should establish effective structures for ongoing communication, collaboration, and facilitation between Degree Works and FACTS staff, advisors, and staff responsible for curricular updates and the Chancellor’s University Report (CUR).
- CUNY and the colleges should undertake a marketing campaign to correct misperceptions of Degree Works, promote its benefits, and emphasize that CUNY has made an institutional commitment to using and supporting Degree Works.
- CUNY should implement Hobson’s Retain software University-wide. Retain will help colleges coordinate all communications with students.
- Colleges may need to hire or repurpose personnel; make changes in organizational structure and revise their campus curriculum approval timeline to the CUR process to ensure new programs and courses are properly scribed.
- CUNY Central should support the development of updated Degree Works training/use strategies materials targeted for faculty, staff, advisors, and students as needed and should
make them accessible to the University community. An annual CUNY-wide training program for campus trainers should be provided on how to use Degree Works features that are underutilized or have been updated, discuss best practices, and review case studies/issues.

- CUNY Central CIS/IT can improve functionality and increase usage by undertaking the following: (Appendix M: CIS/IT Recommendations for Process Improvement of Advisement Technologies and Service)

  a. Upgrade Degree Works to 4.1.4 to improve current functionality and services.
  
  b. Modify FACTS logic to resolve reported issues.
  
  c. Hire full-time report/query writer/support staff member.
  
  d. Implement Hobson’s Retain software CUNY-wide.
  
  e. Contract with Ellucian for professional services to include:

    - Modification of the application to better meet CUNY’s needs (Appendix M).
    - Provision of training to help staff better understand the data schema for report writing.
Advisement Technology Steering Committee
Lucinda Zoe, University Dean of Undergraduate Studies
Annamarie Bianco, University Registrar
Olga Vega, CIS/Degree Works Project Manager
Erec Koch, Senior University Fellow
Deborah Hairston, CIS/Central Degree Works Coordinator
Sumaya Villanueva, Director of Advisement, John Jay
Jimmy Anastatio, IT/CIS (Advisory)

AT Implementation Team
Advisement Working Group
Zuleika Clarke, Co-Chair, Advisement Council, Director of Advisement, KBCC
Octavio Melindez, Director of Advisement, BCC
Laura Silverman, Director of Advisement Queens College
Maureen Sullivan, Director of Advisement, Hunter College

Scribers & Registrars Working Group
Takiyah Ali, Deputy Registrar, Lehman
Terrence Brown, Deputy Registrar, Hostos
Gale Cunningham, DGW Master Scriber, York
Lisa Freeland, Associate Registrar, Queensborough
Denise Lucena-Jerez, Senior Master Scriber, Hunter College
Thomas Sabia, DGW Master Scriber, City College

OAA staff assembled to assist the Working Committees
Andrea Baker, Executive Assistant to the Executive Vice Chancellor and University Provost
Erin Croke, Director of Undergraduate Educational Policy
Karen Kapp, Director of Administration and Grants
Cheryl Littman, University Associate Dean of Institutional Effectiveness
Ken Norz, University Academic Affairs Manager