Provost's Task Force on Textbook Affordability Report in Response to Request from the Office of the Secretary of Higher Education for Institutional Plans for the Use of Open Textbooks and Digital Learning Materials April 2020

In November 2019, Provost Joshua Powers charged a University-wide task force to prepare a report in response to the New Jersey Office of the Secretary of Higher Education regarding institutional plans for the use of open textbooks and digital learning materials. The request from the state sought answers to 15 items related to the implementation of P.L.2019, c.77 enacted to expand the use of open textbooks and commercial digital learning materials in order to achieve savings for students enrolled in the institution.

Under the overall guidance of Edward Owusu-Ansa, Dean of the Library, and Co-Chaired by Robert Harris and Richard Kearney, the committee of 11 persons including the co-chairs prepared answers to the requested items, informed by their assessment of campus efforts to date and a campus-wide survey of faculty. The following is their report and reflective of the University's plans going forward.

Vision [Question 1: Statement summarizing institutional vision]

The university's textbook affordability plan promises to reduce significantly the cost of textbooks for students through the adoption and creation of high-quality open educational resources (OER) and appropriate commercial digital learning materials. The university is committed to empowering faculty to undertake course conversions that will enable the use of OER materials and remove the financial barriers students currently face in obtaining access to textbooks. Implementation of this plan will have a meaningful impact by contributing to our student success and retention efforts.

The Need for Textbook Affordability [Question 2: Address need to expand use of OER and other digital learning materials]

The high and rising cost of college textbooks and other learning materials from commercial providers constitutes a serious and increasing challenge for students, and recent studies indicate students are having great difficulty meeting the challenge, with negative consequences for their academic achievement. The most recent (2018) *Student Textbook and Course Materials Survey Report* produced by the Florida Virtual Campus Office of Distance Learning and Student Services, based on responses from over 21,000 students, found that students were spending less money on textbooks in 2018 than they did when the previous survey was conducted two years earlier. While part of this decline was accounted for by the adoption of cost-reduction strategies like purchasing used copies, renting textbooks, or seeking discounted alternatives from sources other than campus bookstores, it is significant that students' five highest-ranking responses to high textbook costs were:

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¹ Office of Distance Learning and Student Services, Florida Virtual Campus, *2018 Student Textbook and Course Materials Survey: Results and Findings*, March 8, 2019. Tallahassee, FL. Available at https://dlss.flvc.org/colleges-and-universities/research/textbooks

- not purchasing the required textbook (64.2%)
- taking fewer courses (42.8%)
- not registering for a specific course (40.5%)
- earning a poor grade (35.6%); and
- dropping a course (22.9%)

A 2018 study conducted by Wakefield Research on behalf of VitalSource Technologies, a digital learning platform company, surveyed some 400 traditional-age students at four-year colleges and found that 85 percent of respondents reported either postponing buying required materials or choosing not to buy them at all, with the vast majority (92%) citing cost as the reason. Almost 40 percent of the U.S. students surveyed believed these decisions had a negative impact on their grades.²

A 2019 report published by the National Association of College Stores, based on a survey of almost 20,000 students at 41 four-year and two-year institutions across in the U.S. and Canada, found that student spending on course materials declined during the 2018-2019 academic year as compared with the previous year. This was attributable in part to a sharp increase in students turning to free online course materials, with 22 percent of respondents reporting downloading at least one such item during the year. These materials include both legal open educational resources and illegal pirated copies of commercial textbooks.³

Although the University has not undertaken similar surveys of our student population regarding their textbook purchasing practices, many faculty are aware that students often delay or decline to acquire assigned textbooks for their courses. Each semester many students visit the Library seeking copies of their textbooks, and while the Library strives to make copies available on reserve whenever possible this can only partially meet the needs of students. Our informal observations indicate that our students' textbook purchasing practices have been following patterns similar to those indicated in large-scale surveys, with similar negative impacts on achievement, course enrollment, and retention.

The Current Status of Open Educational Resources (OER) at the University [Question 3: Current status of OER and other digital learning materials at WPUNJ]

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² VitalSource, "Study finds majority of college students delay purchasing textbooks due to cost," Press Release, August 1, 2018. Available at https://press.vitalsource.com/study-finds-majority-of-college-students-delay-purchasing-textbooks-due-to-cost

³ National Association of College Stores, "NACS Report Shows 14% Decrease in Spending on College Course Materials," Press Release, July 24, 2019. Available at http://www.nacs.org/advocacynewsmedia/pressreleases/tabid/1579/ArticleID/867/Student-Spending-on-Course-Materials-Declines.aspx; Rebecca Koenig, "More College Students Are Downloading Course Materials for Free — Or Skipping Them Entirely," *EdSurge*, July 25, 2019. Available at https://www.edsurge.com/news/2019-07-25-more-college-students-are-downloading-course-materials-for-free-or-skipping-them-entirely

To gather information on faculty awareness and use of OER, the Task Force circulated a twelvequestion survey to faculty in the 2020 Spring semester. Nine questions treated content-based questions and three located the faculty demographically.

When asked what media they used to replace a commercially published textbook...

- 10% reported regularly using electronic books from the library
- 44% regularly used articles from library databases
- 38% regularly used library videos (streaming and non-steaming)
- 62% regularly used self-created materials, and
- 63% used materials described as open access

The factors most important to selection of teaching materials focused primarily on relevance (covers my subjects, are relevant to curriculum), but also included cost.

• 21% reported that they were interested in relevance to the curriculum, 20% felt that subject matter was most important, and 16% were primarily concerned with cost.

In total 78% of respondents were aware of open educational resources.

- Usage was somewhat spottier. 61% of respondents reported never having used OER material, and only 9% used OER extensively.
- Ease of searching for OER materials showed that 24% found it Difficult or Very Difficult whereas 68% found it Easy or Very Easy
- University faculty indicated a strong interest in trying open educational resources, with 70% reporting likely or very likely "to consider using a no/low cost open educational textbook that is peer reviewed."
- The quality of materials topped most important deterrents at 21%. The other eleven options all rated below 10%.
- The final substantive questions asked which materials faculty would be likely to use. 20% indicated interest in low/no-cost textbooks, ad 17% would use library eBooks.

Demographically, 69% of respondents were tenure-track and the remainder worked part-time. More than half of respondents had worked in their position for over 16 years. 35% represented the College of Humanities and the Social Sciences, and 26% of the respondents belonged to the College of Science and Health.

The Department of English has recently converted first-year courses for the writing and literature programs, with the help of an instructional technologist. In one multi-section course we estimate that the English Department saved students \$72,500 over a single semester.

A Plan for Greater Textbook Affordability at WPUNJ [Question 4: Institutional plan to expand use of OER and other digital learning materials at WPUNJ]

Over the next five years, we plan to implement a significant conversion of courses to the use of OER resources across the university. We have targeted courses to become OER-based by 2024-25, using a three-phased approach: 1) first-year courses in which a large percentage of incoming students are enrolled during their first year; 2) core courses which impact the highest number of students; and 3) required courses with significant textbook and other material costs. Our goal is to convert approximately 25 courses to an OER basis by the end of this period.

This three-phased approach is designed to make the most impact in cost saving for the greatest number of students, in as short a time as possible. We hope to reach 50% of our goal by the end of FY 2023, and 100% of that goal by the end of FY 2025. Following the three-phased plan outlined below, additional OER opportunities will be identified per department to ensure maximum possible efficacy.

Phase 1:

This phase begins by targeting courses required of students in the first year of university, to allow OER resources to be used with the greatest number of students first. Courses to be considered for this phase of conversion to OER-based resources include:

- BIO 1120 General Anatomy and Physiology I (237 students enrolled in Fall 2019)
- BIO 1130 General Anatomy and Physiology II (87 students enrolled in Fall 2019)
- BIO 1140 Applied Anatomy and Physiology (63 students enrolled in Fall 2019)
- BIO 1200 Human Biology (174 students enrolled in Fall 2019)
- BIO 1630 General Biology I (220 students enrolled in Fall 2019)
- BIO 1640 General Biology II (66 students enrolled in Fall 2019)
- BIO 1700 Basic Microbiology (58 students enrolled in Fall 2019)
- ENG 1100 College Writing (1,466 students enrolled in Fall 2019)
- ENG 1500 Experiences in Literature (365 students enrolled in Fall 2019)
- HIST 1030 Foundations of Civilization (326 students enrolled in Fall 2019)
- HIST 1040 The Early Modern World (219 students enrolled in Fall 2019)
- HIST 1050 The Modern World (558 students enrolled in Fall 2019)
- MATH 1100 Contemporary Mathematics (283 students enrolled in Fall 2019)
- MATH 1150 College Algebra (300 students enrolled in Fall 2019)
- MATH 1160 Precalculus (108 students enrolled in Fall 2019)
- MATH 1170 Business Mathematics (255 students enrolled in Fall 2019)
- MATH 1300 Elementary Statistics (190 students enrolled in Fall 2019)
- MATH 1600 Calculus I (80 students enrolled in Fall 2019)
- MATH 1610 Calculus II (39 students enrolled in Fall 2019)
- PHIL 1100 Introduction to Philosophy (699 students enrolled in Fall 2019)
- PHIL 1120 Philosophy of the Future (101 students enrolled in Fall 2019)
- PHIL 1600 Ethical Well Being (126 students enrolled in Fall 2019)
- COMM 1100 Communication in Action (410 students enrolled in Fall 2019)
- COMM 1190 Survey of Communication Studies and Practice (156 students enrolled in Fall 2019)

- SPAN 1100 Basic Spanish I (396 students enrolled in Fall 2019)
- SPAN 1110 Basic Spanish I (288 students enrolled in Fall 2019)
- PSY 1100 General Psychology (624 students enrolled in Fall 2019)
- SOC 1010 Principles of Sociology (317 students enrolled in Fall 2019)
- SOC 1020 Social Problems (159 students enrolled in Fall 2019)
- PBHL 1100 Healthy U (618 students enrolled in Fall 2019)
- POL 1100 Introduction to Politics (41 students enrolled in Fall 2019)
- POL 1150 Power, Justice, and Freedom (138 students enrolled in Fall 2019)
- POL 1200 American Government (141 students enrolled in Fall 2019)
- POL 1250 Law in Everyday Life (148 students enrolled in Fall 2019)

Phase 2:

In addition to required courses in the first year listed above, Phase 2 targets heavily populated core courses, such as those acting as a gateway to a major, those with University Core Curriculum designation, or those with a large number of sections offered regularly. Just as the first phase of planning seeks to reach the greatest number of first-year students, Phase 2 targets the courses with the most students overall. For example, CCJ 2610 - Essentials of Criminal Justice (255 students enrolled in Fall 2019) is a course that enrolls a large number of students seeking to pursue the undergraduate major in criminology and criminal justice and is a course required of all students in the program. Making these courses a priority for conversion to OER-based materials will impact more students right away.

Phase 3:

During this phase, which may overlap with Phase 2 in timing and identifying target courses, we will identify courses with the highest amount of associated textbook (and other material) cost per student. These courses will be addressed early in the process to establish the feasibility of conversion to OER and the potential for greatest cost reduction for individual students.

Estimated Cost Savings [Question 5: Estimate of cost savings]

According to surveys conducted by the College Board, the average cost of books and supplies for undergraduate students attending four-year public colleges is estimated at \$1,230 for the 2019-2020 academic year.⁴ In the fall of 2019, 1,529 full-time first-time first-year students enrolled at the University. Full achievement of the first phase of our proposed plan - to convert high-enrollment first-year courses to the use of OER resources - could therefore yield significant savings to students as these courses become available. While the specific savings will depend on the average current cost of textbooks in a given course and its annual enrollment, we project an average savings of approximately \$120,000 per course per year will be achieved.

OER Implementation Team [Question 6: Details about the leadership team to expand the use of OER and other digital learning materials at WPUNJ]

⁴ College Board, *Trends in College Pricing 2019*, *Trends in Higher Education Series*. 2019. [Available at: https://research.collegeboard.org/pdf/trends-college-pricing-2019-full-report.pdf]

It is anticipated that a leadership team to expand the use of OER and commercial digital learning materials will be drawn from faculty in each of the university's five colleges, including faculty who already have experience using OER materials and are in the best position to offer informed perspectives and answer practical questions about pedagogy as teaching peers. The team will also include representatives from campus units that support faculty and instruction, including information technology, instruction and research technology, and the library. These members of the team are qualified to provide the technical and other support faculty will need to implement the use of OER materials without having to take on the burden of acquiring expert knowledge in technologies specific to such materials. The university administration will also be represented on the team and can play a key role in strategic direction, leadership, and coordination of efforts across units.

OER Course Development and Implementation: The Collaborative Process [Question 7: The collaborative process for OER course development and implementation]

Faculty, librarians, and instructional technologists already active in adopting and creating OER materials have developed a nascent structure for collaboration over the last few years whereby faculty interested in converting a course to the use of OER materials can request support from staff affiliated with the Center for Teaching with Technology and the Cheng Library to assist with the identification of appropriate OER materials and the modification of a course's structure and design so as to optimize it for the use of OER and other low-cost instructional materials. At present staffing levels, this model can be expanded to support more faculty interested in converting their courses to an OER basis, particularly in instances where course conversion primarily involves the adoption of open textbooks and other OER materials.

For faculty who wish to produce their own OER materials or modify existing OER materials where licenses permit this, training in the use of OER editing tools will be necessary. Among the most important of these tools currently available are the free and open source Pressbooks editor, the Anthologize plugin software for WordPress, and the widely used Google Docs, which the open textbook publisher OpenStax recently announced would replace its legacy editing tool this year. All three provide support and training materials, and online training for Google Docs is currently available through the University's LinkedIn Learning subscription. The combination of network services, appropriate and user-friendly platforms and software, and consultation and training services housed within the Center for Teaching with Technology, will provide faculty with an effective infrastructure for OER course development and implementation.

Funding OER Implementation [Question 8: Potential sources of funding]

The success of any OER implementation plan depends in large part on the willingness of faculty to undertake the work necessary to redesign course curricula for the use of OER materials for instruction and learning. While the work involved can vary from adoption of an open textbook, to the adaptation of existing openly licensed materials for local use, to the creation of new openly licensed materials, all such redesign projects require time, and most institutions that

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⁵ Daniel Williamson, "Saying goodbye to CNX and hello to the next chapter!," *OpenStax Blog*, February 7, 2020 [https://openstax.org/blog/saying-goodbye-cnx]

have undertaken OER implementation plans provide funding to support this work so it can be carried out at a reasonable pace. Funding awards for individual course redesign projects are relatively modest, with most ranging from \$500 to \$2,000 per course, but the student savings are significant, particularly for high-enrollment courses, and cumulative over time as sections are offered year after year with revisions falling into typical patterns of course maintenance. To use some examples from New Jersey institutions:

- Rowan University's Textbook Alternative Program has provided approximately \$10,000 per year to fund course redesigns for OER, with grants of \$2,000 per faculty member
- The New Jersey Institute of Technology's Open and Affordable Textbook Program has budgeted \$10,000-\$12,000 per year to fund course redesigns for OER, with grants ranging from \$1,000 to \$1,500 per faculty member
- Rutgers University's Open and Affordable Textbooks Program has awarded 59 grants of approximately \$1,000 each to faculty since 2016

Possible sources of external funding for OER implementation include the William and Flora Hewlett Foundation, which has a history of supporting OER development in postsecondary institutions, and the federal funding available through the Developing Hispanic-Serving Institutions (HIS) Program (Title V), which is intended "to assist HSIs to expand educational opportunities for, and improve the attainment of, Hispanic students. These grants also enable HSIs to expand and enhance their academic offerings, program quality, and institutional stability."

Challenges in Expanding the Use of OER [Question 9: Potential obstacles to expanding the use of OER and other digital learning materials; plans to address these]

Faculty are supportive of the open resources effort but the challenge is to get buy-in for course conversions. Because our first success was engineered largely with the support of a strong chairperson we are planning to meet with more chairs. As mentioned above, members of the OER Task Force are planning their own course conversions and/or canvassing their departmental colleagues. In each case the librarian and instructional technologist who can be considered the most enthusiastic OER advocates will visit the chair in of the targeted department to explain the importance of the project. We are aware that some schools have obtained grants to support faculty with release time to convert their courses, and we are looking into our options. Finally, some members of the task force have expressed the concern that if faculty get release time they'll assume that they need to wait until it is their turn, a mindset that would work against us.

Providing Students with Information about and Access to OER [Questions 10, 11, and 12: How students will be informed about OER course offerings and other digital learning materials; ensuring access; storing and maintaining content]

Dissemination of information about the availability OER courses can be done effectively and efficiently through our online catalog and registration system. At the present time, a number of course attributes are already provided through this system, including a course's University Core Curriculum designation, whether a course is writing or technology intensive, its mode of

delivery, and so forth. Courses that are offered on an OER basis can also be identified as such through this system. Using the online catalog and registration system to identify OER courses has the added benefit of enabling the collection of data for assessment and reporting on the progress of OER implementation, enrollment, and student achievement levels.

In addition to using this system, advisors can also help students become aware of the availability of OER course offerings and we can and should undertake an initial promotional campaign on campus to spread awareness of OER courses.

While several repositories exist for open texbooks and other OER materials, including the Open Textbook Library, OpenStax, OER Commons, GALILEO Open Learning Materials. LibreTexts, the recently launched New Jersey Open Educational Resources repository maintained by VALE New Jersey, and others, it is important that any open textbooks being used at the University, as well as open textbooks and other materials that may have been modified or otherwise customized by faculty for local use, be stored locally in order to ensure access. We are exploring the possibility for these materials to be stored and maintained on the dotCMS content management system, with catalog records being created for access to the files and made accessible through the Cheng Library. This will ensure visibility, access, and storage on a campus-wide basis.

Collaboration with Other Institutions [Question 13: Collaboration with other institutions]

A local school, Passaic County Community College, started working with open resources a few years ago, and we are working with them in the hopes of emulating their success. Richard Kearney, the librarian most active in OER circles, has been working with PCC for the last year. The head of the Center for Teaching and Technology, Robert Harris, has been active in the OER community by attending and speaking at conferences, as well as visiting other schools. Harris manages OER online discussion board for the Northeast Regional Computing Program (NERCOMP) the EDUCAUSE regional group. Kearney and Harris collaborated on and presented a session at the NJEDge.com conference in January of 2019.

Assessment [Question 14: Assessment]

Faculty were surveyed about their use of OER to collect baseline data for this report. A repeat of this survey will be undertaken yearly over the course of the plan implementation in order to assess faculty adoption levels and to collect anecdotal evidence about successes and issues. A survey of students will also be administered to assess attitudes about the efficacy of OER materials and its financial impact. Average grades and student course completion for selected courses where OER is newly implemented will be tracked over two consecutive semesters after adoption.