
Inclusive excellence online: Pandemic lessons learned supporting traditionally underserved students

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Abstract When the COVID-19 pandemic hit and all higher education pivoted to online learning, the University of Maryland, Baltimore County (UMBC) created 'Finish Line', a programme designed to help former students with some college, but no degree to complete their studies, often several years after they had left the institution. More than 200 students have done so to date, which was a surprising pandemic silver lining for an institution with fewer than 5 per cent of all courses delivered online before 2020. But was Finish Line just a temporary strategic initiative to get through a global health crisis? Or could it also be a proof of concept for how to meet and support 'non-traditional' adult learners where they are — and want to go? In this reflective case study, we offer candid lessons learned to go beyond the logistics of an enrolment management strategy of 're-recruiting' former students through the affordances of online education to reassessing and redefining our 'inclusive excellence' mission in a post-pandemic, often digital-first world.

KEYWORDS: inclusive excellence, student success, online education, institutional transformation

SUMMARY STATEMENT

Considering the COVID-19 pandemic's continued disruption to all higher education, this reflective case study is offered as a candid lesson learned in how one institution explores reinventing itself to be more attractive to non-traditional adult learners with some college, but no degree. To do so, we not only examine the convenience online learning afforded all students during a public health crisis, but also challenge our institution with the opportunity to live out our mission of inclusive excellence more fully. We conclude by focusing on the needs of adult learners, which may require new approaches to course design and delivery and technical support, and encourage other institutions to do the same so that we might collectively improve as a community of practice and strategy for social mobility

that too often remains inaccessible for most adults.

INTRODUCTION

In a recent *Chronicle of Higher Education* special report, 'The Shrinking of Higher Education',¹ Karin Fischer describes how, in the mid-20th century, reaching out and expanding access to (then) non-traditional populations, such as veterans, minorities and women, has always been academe's 'go-to' move when faced with declining enrolments. Now, however, as institutions face a sheer numbers game of too few traditional 18–22-year-olds in the recruitment pipeline, Fischer rightly asks, 'Who's left to enrol?'

Adult learners are a huge potential pool of students; some 39m Americans alone have attended college but left without a

degree.² Enrolling even a portion of these students could help soften the impact of the demographic cliff or make up pandemic student losses.

In this paper, we offer the University of Maryland, Baltimore County (UMBC) as a reflective case study in how one institution has considered reinventing itself to be more attractive to and supportive of its former students with some credits earned but no degree. Beyond institutional viability, UMBC's 'inclusive excellence' mission also presents an opportunity to reflect on how higher education serves adult learners. Primarily, we reflect on lessons learned from UMBC's successful Finish Line³ 're-recruitment' initiative, which leveraged the campus' pandemic pivot to online learning as an opportunity for long-lost students to finish their degrees via the sudden plethora of online courses.⁴ In addition to describing what UMBC has done and is doing, we also explore what any university could do, especially through online education, and the implications for student success.

UMBC'S FINISH LINE PROGRAMME

In hindsight, it seems obvious: re-recruit former students who left without a degree by promoting—even alerting them—that nearly 100 per cent of all courses at their alma mater are now online due to the pandemic. It was not obvious, however, for an institution with fewer than 5 per cent of its courses offered online before the COVID-19 meteor hit in spring 2020. But thanks to an innovative and dedicated team of administrators and staff in enrolment management, undergraduate admissions, academic advising and institutional marketing who recognised the silver lining COVID-19 created, 365 students have re-enrolled through our Finish Line programme, 212 of whom are now proud UMBC alums.^{5,6}

Perhaps more than anything, Finish Line was designed to meet former students where they were, even long after they had left

UMBC's physical campus. Beyond simply having more online courses for them to enrol in, the programme also consisted of key initiatives to lower barriers to students coming back, including streamlined admissions for interested students, high-touch advising including individualised degree audits, technical support, staff advocacy (on behalf of students) to help cut through bureaucracy and (importantly) waiving the US\$50 readmission fee. Some were also eligible for existing degree completion grants of up to US\$3,000.

As a result, the cross-section of the 365 students who have enrolled in UMBC's Finish Line programme to date adds nuance to the compelling 'some college, no degree' population Fischer suggests higher education should re-enrol. Consider the following attributes of UMBC's initial cohort of Finish Line students from autumn 2020:

- Average age: 31.6;
- Sex: 50 per cent female;
- Under-represented minority: 45 per cent;
- First-generation college student: 24 per cent;
- Pell-eligible (U.S. Federal government need-based grant): 23 per cent;
- Prior credits earned: 115 average;
- Out of state: 10 per cent;
- Average UMBC grade point average (GPA): 2.8;
- Proportion entering as 'First Time, First Year' (FTFY) versus Transfer students: 60/40;
- Net tuition revenue (NTR): US\$364,000 (autumn 2020 alone).

Since then, 212 students from a variety of backgrounds have completed their degrees through the Finish Line programme (see Figures 1 and 2).

A RECKONING OPPORTUNITY

By almost any measure, Finish Line has been effective, primarily by meeting students

Ethnicity	Male (M)	Female (F)	Grand Totals
Asian (ASIAN)	25	18	43
Black/African American (BLACK)	23	29	52
Hispanic/Latino (HISPA)	5	11	16
Native Hawaiian/Other Pacific Is		3	3
Not Specified (NSPEC)	9	6	15
Two or More (MULTI)	2	2	4
White (WHITE)	50	29	79
Grand Totals	114	98	212

Figure 1: UMBC Finish Line degree completers by ethnicity and gender (June 2023)

Gender	22 - 24	25 - 29	30 - 39	40 - 49	50 - 59	Grand Totals
Male (M)	27	43	34	8	2	114
Female (F)	11	37	36	11	3	98
Grand Totals	38	80	70	19	5	212

Figure 2: UMBC Finish Line degree completers by gender and age (June 2023)

where they are at, which is to include them in UMBC’s mission, no matter at what point in their journey as lifelong learners. But there have also been important lessons learned about the university, and what it takes for students of all backgrounds to be successful, which the campus may need to reckon with to embody a mission of ‘inclusive excellence’.

For example, Finish Line started with an advising conversation with one former, eager student whose competing life priorities of work and family made it challenging (almost impossible) for him to come to campus to take classes. Our pivoting to online instruction was a game-changer for this student, and it turned out for many others for whom coming to campus was also not a viable option, given everyone’s priority on public health and safety. But Finish Line also emerged as a

surprising, compelling degree-completion blueprint for an institution that may not have been reaching out to non-traditional former students as intensely as it recruits traditional future ones.

Inevitably, as more institutions embrace and support students and faculty returning to campus, how will we remember, implement and even build on lessons learned from the pandemic pivot to online learning? Specifically, how will we support adult learners who would like to finish, but may find it difficult leaving jobs or caring for loved ones to attend class on campus during the day? Are we willing and able to reintroduce former students who have not been on campus in a while, and in fact, may be different, more mature adults than they were when they first arrived — and then left? In short, does higher education’s mission include the needs of adult learners

who want to return — and thus epitomise a commitment to lifelong learning?

ONLINE LEARNING AS GAME-CHANGER

As UMBC returns to more normal operations and reckons with the success and implications of Finish Line, one lesson learned is that not all courses have to be online. In fact, coupled with a robust institutional data warehouse that allowed us to leverage course utilisation data to better understand the needs of Finish Line students, we also spoke with these returning students directly, to better understand why they did not finish their degrees in the first place.

Among other things, we found that a critical mass of Finish Line students simply needed one or two General Education Program (GEP) courses, typically 100- and

200-level courses in math, science or culture, that they had put off completing their 300- or 400-level courses in their major during their first stint as a first-time, first-year or transfer student (see Figure 3). At the same time, a critical mass of Finish Line students also enrolled in non-GEP courses as well as upper-level courses — likely needed to fulfil major requirements (see Figure 4).

The key point, however, is that when 30 key courses suddenly were offered online, it opened the door for more than 200 students to complete their degrees. Yes, there were some upper-level courses in the mix, but most were 100- and 200-level courses that students, for one reason or another, had put off completing. In conversations with Finish Line students upon their return to UMBC about their first enrolment experience and their GEP courses, we know that students often put off what they were most challenged

General Education Program (GEP) Designation	Courses #	Course Title
Foreign Language (L)	FRENCH 201	Intermediate French
	SPAN 201	Intermediate Spanish
Arts and Humanities (AH)	ANCS 210	Classical Mythology
	PHIL 100	Introduction to Philosophy
Culture (C)	ANCS 210	Classical Mythology
	MLL 305	Intro to Intercultural Communication
Math (M)	MATH 152	Calculus and Analytical Geometry II
	STAT 121	Intro to Statistics: Social Sciences
	STAT 350	Statistics w Application in Biological Sciences
Science (Non-Lab) (S)	CHEM 101	Principles of Chemistry I
	GES 110	Physical Geography
Science (Plus Lab) (SL)	SCI 100	Water: Interdisciplinary Study
Social Sciences (SS)	AGNG 200	Aging People, Policy and Management
	PSYC 230	Psychology and Culture
	SOCY 321	Race and Ethnic Relations
Writing Intensive (WI)	ENGL 393	Technical Communication
	AGNG 200	Aging People, Policy and Management
	SOWK 360	Social Welfare, Policy and Work II

Figure 3: Finish Line GEP designated course enrolment for autumn 2020 and spring 2021

Courses #	Course Title	Note
IS 300	Management Information Systems	Pre-requisite for 14 IS courses; Required for IS major
MATH 104	Quantitative Literacy	Required for students not testing into college-level math course
SPAN 101	Elementary Spanish I	Required for students who have not demonstrated proficiency at the 101 level
SPAN 102	Elementary Spanish II	Required for students who have not demonstrated proficiency at the 102 level
PSYC 309	Psychology Discipline and Careers	Pre-requisite for PSYC 311; Required for PSYC major
PSYC 311	Research Methods in Psychology	Pre-requisite for 28 PSYC courses and 2 GWST courses; Required for PSYC major
PSYC 320	Psychological Assessment	Not a pre-requisite course; May elect to fulfill PSYC domain requirement
PSYC 387	Community Psychology	Not a pre-requisite course; May elect to fulfill PSYC domain requirement
SOWK 470	Social Work Research	Not a pre-requisite course; Required for the Social Work major
SOCY 300	Methodology: Social Research	Pre-requisite for 3 HAPP and 2 SOCY courses; Required for the SOCY major
SOCY 301	Analysis of Sociological Data	Pre-requisite for 1 ECON, 2 HAPP and 2 SOCY courses; Required for the SOCY major
SOCY 409	Sociological Theory	Not a pre-requisite course; Required for the SOCY major

Figure 4: Finish Line non-GEP designated course enrolment for autumn 2020 and spring 2021

with (eg math, science, foreign language, etc.) but were finally faced with completing it in their last semester and things did not go well.

We also know that there were policies in place at the time that did not serve our students well. For example, UMBC’s commencement participation policy at the time explicitly allowed a student who was ‘deficient up to 8 gen ed credits to participate in the commencement ceremony’. So, unfortunately, students and advisers leveraged this policy in students’ academic planning. Students participated in commencement with the ‘intent’ to come back and finish the remaining course(s) but kept walking. This policy has since been changed. Students can only participate in commencement if *all* degree requirements have been met.

For the non-GEP courses that Finish Line students did not complete initially, they report that their academic experience was essentially disrupted by life. Many of

them speak of parents who suddenly took ill that they needed to care for, other family obligations (children), mental health, job obligations, etc., that became competing priorities.

But if most students now take four to six years to graduate and have not taken, let alone completed, Intermediate Spanish, college algebra or that lab-science course since their junior or senior year of high school, these obstacles to a degree may loom larger than the simple three- to six-course credit gaps represented in a transcript. Now, add ten years to that time to degree completion, along with the need to drive back to and park on campus for a morning or afternoon class meeting three times a week. For busy, working adults with family obligations, this might as well be a NASA mission to the moon. And no less tantalising — or frustrating — because we can still see the moon and want to go. But then, the world stops turning and those courses you had put off completing for years are

now available online — and can come to you, wherever you are. Well, that truly is a game-changer.

Similarly, another lesson learned is that the conditions and obstacles our former (now Finish Line) students have encountered may exist for our current students, too. So, do we have to wait for students to leave the physical campus to re-recruit them with more convenient online courses? What, if anything, could we do to retain them? For this reason, Finish Line has helped raise awareness of students who might not be as far along in their accumulation of required course credits and may be on the fence about their major selection itself. These students may be interested in a new ‘Multidisciplinary Studies Track’ (MDST)⁷ in UMBC’s Individualized Degree Studies (INDS) programme, the core of which is offered online.

To be clear, this option targets Finish Line students with 60 credits, not those who typically had 115 (out of 120 required for a degree). The MDST option provides students with a significant number of credits (perhaps from a previous major) with an opportunity to chart a different direction focused on a new career trajectory. Highly personalised MDST advising and programme planning often combine courses from various disciplines and incorporate applied learning, internships and independent study or research. Finally, and perhaps most significantly, MDST provides an opportunity for degree completion with online coursework.

The return to campus also coincides with a new review of UMBC’s General Education Program⁸ itself, which was postponed due to the pandemic. While nothing has been formally proposed, what if UMBC could explore (and support) that at least three to six GEP credits could be taken through online or hybrid/blended delivery? Interestingly, there is some precedent for this at the University of Central Florida (UCF), one of the largest US public institutions, which

found students who took a mix of online/hybrid and face-to-face (F2F) courses graduated in 3.9 years versus 4.3 years for students who only took F2F courses.⁹

Not only might some online/blended GEP courses help students’ time to degree completion, but it also might give new relevance to two of UMBC’s five required general education competencies¹⁰ (eg no. 4 ‘Technological Competency’ and no. 5 ‘Information Literacy’). Since learning how to learn online is, and probably always will be, part of what it means to be a lifelong learner and employee, why not incorporate these into UMBC’s General Education reform initiative in the first place?

Indeed, many of our returning Finish Line students (average age of 31) exhibited a technology proficiency gap and lacked familiarity with tools such as our *myUMBC* campus portal, Blackboard learning management system (LMS) and online learning tools or processes. So much so that our Office for Academic and Pre-professional Advising, which is the primary support system for our Finish Line students, has developed an ‘orientation’ programme to provide an ‘introduction/refresher’ of these critical tools they will need to be familiar and proficient with to be successful in their coursework as they re-engage with the institution. This complements other guides to online learning available to all students through our Academic Success Center that emerged during the pandemic.¹¹

HISTORY OF ONLINE LEARNING AT UMBC

As stated previously, before the pandemic, fewer than 5 per cent of all UMBC courses were delivered solely online, and fewer than five courses in total were offered at the undergraduate level. One of the first was IS 461 ‘Health Informatics’, offered by Roy Rada, now Emeritus Professor of Information Systems (IS), and founder of UMBC’s online Master’s degree in IS. In

fact, it was Rada who introduced UMBC to Blackboard, which he had used at Pace University in New York, and recommended in 1999 when he came to UMBC.

As described in the 2007–8 strategic plan for teaching, learning and technology,¹² UMBC's early history of online learning consisted primarily of three separate, online Master's programmes, all developed independently of each other: Emergency Health Services (1998), Information Systems (2001) and Instructional Systems Development/Education (2003). There was little institutional coordination, which meant these academic programmes not only had to design and deliver their courses largely on their own, but also recruit and market the programmes, and help students navigate institutional resources that typically were only offered on campus and during the day.

In 2006, UMBC's Division of Professional Studies (DPS) and Division of Information Technology (DoIT) partnered to create the Alternate Delivery Program (ADP),¹³ focused on hybrid/blended and online learning, primarily through UMBC's summer and winter 'special sessions'. Among other things, DPS offered a generous course design stipend, and DoIT's instructional technology staff offered small group and individual consulting to help faculty redesign traditional F2F courses for alternate delivery.

In 2014, DoIT staff also redesigned the ADP based on the widely respected Quality Matters (QM)¹⁴ rubric and standards for peer review of effective online course design (not instructor delivery). Before the pandemic, nearly 100 faculty had gone through the ADP, some of whom also began offering their newly redesigned summer/winter courses in autumn and spring terms.

More recently, DPS has stepped up to provide programme development support and marketing for all applied Master's programmes, including for the newest, Systems Engineering, established in 2015. Four years later — and a year before the pandemic — the ongoing partnership

between DPS and DoIT resulted in UMBC doubling the number of instructional technology support and design staff, representing one of the largest institutional investments in online learning.¹⁵ In many ways, this proved to be fortuitous, if not prophetic.

As part of the rapid shift to online learning in spring 2020, DoIT's Instructional Technology team quickly designed, implemented and evaluated an award-winning programme, 'Planning Instructional Variety in Online Teaching' (PIVOT),¹⁶ based on the ADP's use of QM, which reached 70 per cent of faculty, by far our largest IT training initiative ever. Notably, with 85 per cent of participants saying the programme was helpful for their pedagogical shift to online teaching, PIVOT leveraged a network of 25 faculty peer mentors¹⁷ to support their colleagues through the programme, which focused on an individual instructor's reflection on technology use, online pedagogies and course design.

As a result, in 2021, PIVOT earned an 'Effective Practice' award¹⁸ from the Online Learning Consortium (OLC) as well as UMBC's own 'Job Well Done' award¹⁹ from the human resources (HR) department. In 2022, PIVOT also helped UMBC win a Blackboard 'Catalyst' award²⁰ for 'training and development' (after first doing so for 'leading change' in 2017²¹), and has served as an assessment case study.²²

Beyond our outreach to faculty in a crisis and a long institutional commitment to analytics,²³ the foundation of faculty training in good-quality online course design, including accessibility and universal design for learning (UDL), means we are poised to be 'inclusive' in our course designs, regardless of their mode of delivery. As the saying goes, good teaching is good teaching, so why should instructional mode of delivery matter so much? Sure, online teaching and learning may not be for every instructor or student, and it is neither likely nor desirable

that UMBC should become a completely online institution. But if we have learned one thing from the pandemic pivot to remote instruction for nearly two years, it is that we can do it. And some instructors and students even prefer it.

ANDRAGOGY VERSUS PEDAGOGY: TEACHING ADULTS VERSUS CHILDREN/YOUTH

The one area UMBC may need to develop further in our online and hybrid/blended course designs and offerings is a more nuanced understanding and implementation of andragogy (the philosophy of teaching adults) as opposed to pedagogy (the philosophy of teaching children or youth). The leading proponent of andragogy was Malcolm Knowles,²⁴ who maintained six key principles of adult learning, summarised by Bouchrika:²⁵

1. *Self-concept*: Adult learners have a self-concept. This means that they are autonomous, independent and self-directed;
2. *Learning from experience*: Experience is a rich resource of learning. Adults learn from their previous experiences. Thus, it is a good repository for learning;
3. *Readiness to learn*: Adults tend to gravitate towards learning subjects that matter to them. Their readiness to learn things is highly correlated with their relative uses;
4. *Immediate applications*: The orientation of adult learning is for immediate applications rather than future uses. The learning orientation of adults tends to slant towards being task-oriented, life-focused and problem-centric;
5. *Internally motivated*: Adults are more motivated by internal personal factors rather than external coaxes and pressures;
6. *Need to know*: Adult learners have the need to know the value of what they are learning and know the why's behind the need to learn them.

Basically, apart from design and delivery of online undergraduate courses intended for 18–22-year-olds, how might our faculty need to rethink how they teach older and more mature learners who still want to earn their Bachelor's degrees? To be sure, many of our faculty have already done so, even intuitively and with distinction. But how, as an institution, do we want to target and cater the needs of our own students returning to the institution (albeit virtually) as adults? That is where UMBC's culture and mission may need to mature as well, if we truly want to live out our mission of 'inclusive excellence' in a post-pandemic, demographic cliff existence of enrolment management.

CONCLUSION

When the pandemic first hit, and it was obvious that higher education (like much of society) would have to transition to a virtual, remote way of operating, Kelvin Thompson and Patsy Moskal at the University of Central Florida rightly cautioned that remote instruction — typified by the explosion of Zoom for real-time, synchronous video conferencing — was not the same as intentionally designed online learning.²⁶ Yet, as we cautiously contemplate teaching and learning after the pandemic, it is difficult to ignore the gravitational pull (and scale) of what COVID-19 caused.

In short, words matter, so to close this case study about one institution, we would like to offer some key distinctions that we might all consider going forward. For example:

- Remote instruction is about crisis management. How do we get through an immediate or even extended disruption to our standard (F2F) operations, which may never be the same again because of COVID-19?;
- Online learning is about student engagement and what they know, understand or can do as a result of

experiencing our suddenly remote or even intentionally designed online courses;

- Online education (the focus of this journal) is about what we intend students to learn — in courses, but also in our curricula, majors, programmes and degrees;
- Online strategy is about who we wish to educate, and how we will reach, serve and support them — or not. As such, it is implicitly about access and inclusion.

So, for an institution whose distinctive mission and culture is ‘inclusive excellence’, what does this mean in a post-pandemic, maybe even ‘digital-first’ world? To be sure, answering this question is still a work in progress, especially as we serve our former students who left with some college, but no degree. Through the affordances of online learning and education, however, we have learned we can meet — and include — more students, no matter where they are at in their journey of lifelong learning. Hopefully, the very lessons and skills we hope they have learned and attained — no matter how they have done so — will be embodied by their alma mater, too. Like our students, we are learning and evolving as a community of and for lifelong learning.

References

1. Fischer, K. (August 2022), ‘The Shrinking of Higher Ed’, *The Chronicle of Higher Education*, available at <https://www.chronicle.com/article/the-shrinking-of-higher-ed> (accessed May 2023).
2. Williams June, A. (November 2019), ‘36 Million Americans Went to College but Didn’t Earn a Degree. Here’s What We Know About the Ones Most Likely to Return and Succeed’, *The Chronicle of Higher Education*, available at <https://www.chronicle.com/article/36-million-americans-went-to-college-but-didnt-earn-a-degree-heres-what-we-know-about-the-ones-most-likely-to-return-and-succeed/> (accessed May 2023).
3. University of Maryland, Baltimore County (UMBC), ‘You’re Near the Finish Line’, available at <https://undergraduate.umbc.edu/finishline/> (accessed May 2023).
4. Rous, P. J., Mozie-Ross, Y., Shin, S. J. and Fritz, J. A. (April 2021), ‘Pandemic Silver Lining: Helping Former Students Finish Degrees Online’, *EDUCAUSE Review*, available at <https://er.educause.edu/articles/2021/4/a-pandemic-silver-lining-helping-former-students-finish-degrees-online> (accessed May 2023).
5. Mozie-Ross, Y., Bittinger, D., Baron, K. and Purvis, M. (April 2022), ‘Finish Line: Supporting Returning Students to Degree Completion’, poster presented at RetriEVER Empowered Student Success + Research + Community, UMBC, available at <https://umbc.box.com/2022finishlineposter> (accessed May 2023).
6. Mozie-Ross, Y. and Fritz, J. (October 2021), ‘A Pandemic Silver Lining: Helping Students Finish Degrees Online’, *EDUCAUSE Annual Conference*, Philadelphia, available at <https://events.educause.edu/annual-conference/2021/agenda/a-pandemic-silver-lining-helping-students-finish-degrees-online> (accessed May 2023).
7. University of Maryland, Baltimore County (UMBC), ‘About the MDST Track’, available at <https://inds.umbc.edu/about-the-mdst-track/> (accessed May 2023).
8. University of Maryland, Baltimore County (UMBC), ‘Welcome: UMBC’s General Education Program’, available at <https://gened.umbc.edu/> (accessed May 2023).
9. Bailey, A., Vaduganathan, N., Henry, T., Laverdiere, R. and Pugliese, L. (March 2018), ‘Making Digital Learning Work: Success strategies from six leading universities and community colleges’, Action Lab at Arizona State University and the Boston Consulting Group, available at <https://edplus.asu.edu/what-we-do/making-digital-learning-work> (accessed May 2023).
10. University of Maryland, Baltimore County (UMBC), ‘UMBC General Education Functional Competencies’, available at <https://gened.umbc.edu/wp-content/uploads/sites/564/2018/11/general-Education-Competencies.pdf> (accessed May 2023).
11. University of Maryland, Baltimore County (UMBC), ‘Online Course Resources’, available at <https://academicsuccess.umbc.edu/online-learning-resources/> (accessed May 2023).
12. Fritz, J. (2007), ‘Richness AND Reach: A Strategic Plan for Teaching, Learning and Technology at UMBC’, UMBC, Baltimore, p. 30, available at <https://doit.umbc.edu/wp-content/uploads/sites/2/2013/11/UMBC-Strategic-Plan-for-Teaching-Learning-and-Technology.pdf> (accessed May 2023).
13. University of Maryland, Baltimore County (UMBC), ‘Alternate Delivery Program (ADP)’, available at <https://doit.umbc.edu/itnm/adp/> (accessed May 2023).
14. Quality Matters, ‘Helping you deliver on your online promise’, available at <https://qualitymatters.org/> (accessed May 2023).
15. Fritz, J. (2019), ‘UMBC Makes Major Investment in Instructional Technology’, *UMBC DoIT News*, available at <https://doit.umbc.edu/news/?id=83448> (accessed May 2023).
16. University of Maryland, Baltimore County (UMBC),

- ‘Welcome to PIVOT ...’, available at <https://pivot.umbc.edu/> (accessed May 2023).
17. University of Maryland, Baltimore County (UMBC), ‘Peer Mentors’, available at <https://pivot.umbc.edu/pivot/peer-mentors/> (accessed May 2023).
 18. University of Maryland, Baltimore County (UMBC), ‘PIVOT Selected to Receive OLC Effective Practice Award’, available at <https://doit.umbc.edu/post/111756/> (accessed May 2023).
 19. University of Maryland, Baltimore County (UMBC), ‘Job Well Done Award Program’, available at <https://hr.umbc.edu/job-well-done-award-program/> (accessed May 2023).
 20. University of Maryland, Baltimore County (UMBC), ‘PIVOT Receives Blackboard Award for Training’, available at <https://doit.umbc.edu/post/126203/> (accessed May 2023).
 21. Hanks Mastrola, M. (July 2017), ‘UMBC IT leaders honored for supporting student access through innovative data analytics’, UMBC News, available at <https://umbc.edu/stories/umbc-information-technology-leaders-honored-for-supporting-student-success-through-innovative-data-analytics/> (accessed May 2023).
 22. Fritz, J., Hawken, M. and Shin, S. (2022), ‘Using Learning Analytics and Instructional Design to Inform, Find, and Scale Quality Online Learning’, in Liebowitz, J., *Online Learning Analytics*, Taylor & Francis, New York, p. 20.
 23. University of Maryland, Baltimore County (UMBC), ‘Analytics’, available at <https://analytics.umbc.edu/> (accessed May 2023).
 24. Knowles, M. S. (1970), *The Modern Practice of Adult Education; Andragogy versus Pedagogy*, The Association Press, New York.
 25. Bouchrika, I. (2021), ‘The Andragogy Approach: Knowles’ Adult Learning Theory Principles’, Research.com, available at <https://research.com/education/the-andragogy-approach> (accessed May 2023).
 26. Thompson, K. and Moskal, P. (2020), ‘Simultaneously Supporting Faculty for Remote Instruction and (Actual) Online Teaching During COVID-19’, OLC, available at <https://onlinelearningconsortium.org/simultaneously-supporting-faculty-for-remote-instruction-and-actual-online-teaching-during-covid-19/> (accessed May 2023).