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Patron-Driven Purchase on Demand Programs for Printed Books and Similar Materials: A Chronological Review and Summary of Findings

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Introduction

Among academic librarians, collection development has long been considered a vital duty, if not something of a nigh-sacred trust and exercise of librarians' authority and judgment.1 Over the decades, selecting librarians have done their level best, by identifying the best materials and by being familiar with the faculty and students that they served, to build useful and coherent collections that would both fulfill current users' needs and anticipate the needs of future patrons (Stowell Bracke, Hérubel, & Ward 2010; Hodges, Preston, & Hamilton 2010). This collection-building model, often called the "Just-in-Case" model, unfortunately has had a number of shortcomings. The first and foremost may be economic, as "price inflation for print and electronic products, the increase in the production of scholarly material, and the increased cost of storing materials that might never circulate" (Hodges et al. 2010) has rendered anything approaching comprehensive collection building no longer feasible. This last point is especially germane as, since at least the beginning of the twentieth century, academic librarians have had repeatedly to acknowledge the difficulty inherent in predicting, via the mechanism of acquisition, which books patrons will want to borrow (Davidson 1943; Fussler & Simon 1969; Trueswell 1969; Bulick, Sabor, & Flynn 1979; Hardesty 1981; Burrell 1985; Britten 1990; Fenske 1994; Eldredge 1998; Blecic 2000). Librarians have both bemoaned the funds wasted on idle books and come to favor interlibrary loan (henceforth, ILL) as the means to overcome collections' shortcomings.

ILL as a solution, however, has had its own shortcomings. As has been noted elsewhere in the library literature, purchased books yield a re-usable capital asset to a library and its community of users (Parker 1991), but books borrowed via ILL pass through libraries' hands and satisfy but a single patron (Perdue & Van Fleet 1999). To add insult to ILL injury, books borrowed via ILL show a propensity toward being borrowed multiple times, which results in multiple ILL-borrowing fees for the same item (Ratcliffe 1983; Perdue & Van Fleet 1999), costs associated with the borrowing of books via ILL have approached parity with the costs of purchasing in many instances

(Roberts & Cameron 1984; Jackson 1998, 2004; Hulsey 2003; Alder 2007), and the majority of items requested via ILL tend to be current, in print, and in the case of books, reasonably-priced titles that could as easily have been purchased (Wender 1969; Wood & Bower 1969; Byrd, Thomas, & Hughes 1982; Roberts & Cameron 1984; Ruppel 2006; Reighart & Oberlander 2008).

Against this milieu, public librarians have long been provocatively arguing that patrons' tastes and interests should shape their libraries' collections (Dana 1896; Rawlinson 1981), and during the latter half of the twentieth century, numerous academic librarians also have been vocally arguing that ILL requests—either alone or in combination with acquisition and circulation data—are a better predictor of what patrons will want than are librarians', book-jobbers', or monograph-recommending professors' intuitions.2 It would be but a short, intuitive leap for the more forward-thinking (some might say, "reckless) librarian to move from patron requests to borrow influencing collection development decisions to patron requests producing purchases, but librarians have seemed loath entirely to trust patrons and to share collection development responsibilities.

In the author's estimation, librarians' concerns regarding patron-driven, or purchase-on-demand-style (POD), collection development center upon the governance of the collection and upon the potential ineffectiveness/wastefulness of such a program. The general expectation appears to be that patrons requesting books, either directly or via ILL, will prove to be failures as collection developers because they usually have only their own immediate needs in mind, are uninterested in whether or not the items they request will be of use to other patrons, and will not know whether the items they request will be useful until they have been received (Rottmann 1991; Kuhn 2004; Price & McDonald 2009; Tyler, Xu, Melvin, Epp, & Kreps 2010). Furthermore, patrons will likely be less concerned with libraries' budgetary constraints and so may spend more wildly and carelessly than would a librarian (Reynolds et al. 2010). Another point of concern is that librarians have found that a noteworthy percentage of patrons have proven themselves very poor at determining the adequacy of their libraries' holdings prior to making requests, with some not even consulting their libraries' catalogs prior to turning to ILL (Jackson 1989; Houle 2003, 2004; Bombeld & Hanerfeld 2004; Ingold 2004). With respect to ILL as a potential avenue for acquisitions, librarians have also contended elsewhere that ILL and acquisitions have traditionally been different sorts of services with different service expectations, so acquisitions via ILL has the potential to place unacceptable burdens on ILL staff, especially where the judging of the suitability of books to be acquired (Rottmann 1991) and where the issue of timeliness of delivery are concerned (Rottmann 1991; Badics 2004).

In short, if librarians' concerns were accurate, a POD program driven by patrons' requests would result in libraries purchasing expensive, idiosyncratic, and possibly redundant books to meet particular patrons' narrow and ephemeral needs, books that would not be suitable for the purchasing libraries' collections, that would experience relatively little circulation, and that would have, as a result, comparatively poor use value (Rottmann 1991; Kuhn 2004; Comer & Lorenzen 2006; Price & McDonald 2009; Reynolds et al. 2010; Tyler et al. 2010). Also, such a program would result in ILL departments diverting their staffs' efforts into acquisitions activities that would leave them overtaxed, making collection-related judgments for which they lacked sufficient expertise, and unable to meet patrons' demands for quick delivery.

Perhaps as a result of these and other concerns, the implementation—or even just the pilot testing—of POD programs appears, according to some recent research, mainly to be limited to the libraries of large and public universities (Carlisle Fountain & Frederiksen 2010). Nevertheless, there does seem to be a shift occurring in the library field from "librarian-mediated to patron-initiated collection development" (Hodges et al. 2010, p. 208-9). To address some of the more common concerns surrounding POD programs for books and similar sorts of print materials, the author will review the recent library literature on such programs and summarize the several studies' findings in the hopes that other librarians will be reassured and will consider the benefits of implementing a POD program. It is also to be hoped that this listing of POD programs

will assist librarians in finding successful programs upon which to model their own future efforts, as modeling a new program after past successes may improve its chances for full adoption and success (Carlisle Fountain & Frederiksen 2010).

Review of Literature

Programs in which purchase of books or similar print materials[3] is triggered directly by patron requests or indirectly through patron-initiated ILL requests have created a flurry of interest in the literature and have been forging an increasingly widespread convergence of ILL and acquisitions (Ward, Wray, & Debus-López 2003; Badics 2004; Watson 2004; Egan 2007; Posner 2007; Chadwell 2009; Hodges et al. 2010; McHone-Chase 2010; Nixon, Freeman, & Ward 2010). The library literature suggests that a fair number of trials with POD programs have been successfully carried out at number of libraries of different types and that some programs have been ongoing for quite some time. Credit for one of the earliest adoptions of and the first published article on an ILL-related POD program has generally gone to Bucknell University and to authors Perdue and Van Fleet (Ward et al. 2003; Chadwell 2009; Way 2009; Hodges et al. 2010; Nixon et al. 2010).

In their seminal article, Perdue and Van Fleet (1999) outlined the situation at Bucknell's Betrand Library that led to the formulation of an ILL POD program (e.g., the ILL department was overtaxed, the protocol in place for alerting subject librarians of ILL-requested items suitable for purchase was too slow to meet patrons' needs, the systems in place resulted in duplications of cost and effort, and so forth), and they described the library's one-semester trial and its subsequent continuation as a program. Perdue and Van Fleet did encounter some difficulties and discovered some short-comings while implementing the program: some requests for books listed as in print turned out to be for books that were out of print or not yet published; some book orders were returned by publishers for prepayment; the books acquired by the POD program cost slightly more on average ($37.50 versus $33.85 for firm-ordered titles in 1996-97) in part because they were not acquired from book jobbers and so did not benefit from price discounting; the turnaround time for books that were in print and in stock was 2 ½ weeks; nineteen of the books received and catalogued during the program trial were not picked up by their requestors, which resulted in "a slightly higher percentage of uncompleted transactions than ordinary ILL book transactions that go unused" (p. 22); and at the time the article was written, five of the 135 books purchased during the 1990-91 trial and 27 of the 195 books purchased by the program in 1996-97, its then-latest year, had failed to circulate. However, the positive outcomes reported for the trial and subsequent POD program far outweighed the negative: ILL book borrowing decreased 25%; time spent on book requests by ILL staff was slightly reduced; Acquisitions staff reported that they were spending just five hours per week on the program, and Cataloging staff reported no noticeable impact on their workload; the program, according to the authors, resulted in an increased camaraderie and cooperation between the library's Acquisitions and ILL departments; books purchased during the trial circulated more frequently and consistently than did books firm-ordered by librarians (average circulations of 4.5 and 2.4, respectively); roughly 86% of POD titles acquired in 1996-97 had circulated when the article was authored, and 48% of said titles had already circulated two or more times; the trial and later fully-adopted program acquired a much lower percentage of titles that failed to circulate (3.7% and 14% versus 39% of firm ordered titles); and, finally, Perdue and Van Fleet concluded that the ILL-acquired books proved to be very cost-effective in terms of cost-per-transaction as a result of their elevated levels of circulation. The program was deemed so successful, in fact, that it contributed to a reconfiguration of library departments and services.

As far as the author was able to ascertain, the next POD program to make an appearance in the literature was the University of Virginia's. Clendenning (2001) published a very brief news item on the Purchase Express program that glossed how patron requests could be placed and the vetting and processing workflows in place. Clendenning noted that the program resulted in staffing efficiencies ("Every staff

member handles each user-requested item like a 'hot-potato'" [p. 16]); she noted that domestic items arrived within five or six days and that some overseas orders were delivered within a few weeks; and she also remarked that patrons had provided positive feedback for the program. Notably, the program provided for rush acquisitions of patron initiated orders but was not tied to ILL. Virginia's program re-surfaced briefly in the literature five years later, in a paper on emerging technologies and developing roles for document delivery and resource sharing, wherein Oberlander (2006), amid his broader discussion, briefly raised the possibility of linking POD to direct delivery services, discussed potential workflow and program integration difficulties, and outlined the process for determining best practices at the University of Virginia. Lastly, in a later paper, Reighart and Oberlander (2008) discussed emerging alternatives for resource sharing and their potential for integration with current library structures and workflows in the context of the University of Virginia's and of SUNY Geneseo's recent activities. Within their wide-ranging discussion, they touched briefly upon POD and the University of Virginia's program, with an emphasis on processes and workflow issues. Some of the characteristics of the University of Virginia's 2004-2005 monograph ILL requests/purchases were recounted by the authors, as well, including publication dates of requested monographs, turnaround times, estimated processing/cataloging costs, and expected levels of circulation.

The next program to make an appearance in the literature, Purdue's Books on Demand program, produced a quick profusion of papers. The first, by Ward (2002), discussed the program's one-semester pilot to purchase patrons' ILL-requested recent imprints from Amazon.com, lend them, and then add them to the collection. In her article, Ward presented the pilot project's rationale, purchasing and processing guidelines, and outcomes. Of particular interest among the latter, Ward (2002) found that the prices and shipping costs for the books purchased were within a few dollars of average ILL borrowing costs; that graduate students, followed distantly by faculty, made up the largest percentage of requestors; that patrons affiliated with the humanities and the social sciences requested the bulk of books purchased; that patrons were largely enthusiastic about the timeliness of the process and the usefulness of the received books; that ILL and technical services staff were nearly unanimously positive in their response to the program; that average number of requests per patron was just 1.6 books; and, lastly, that books requested through the pilot appeared in the short term to circulate slightly more than did books obtained through routine channels (28.7% of POD books had circulated subsequent to their return by the original ILL-requesting patron versus 18% of books purchased with regular funds having circulated once). After the Books on Demand program had run for two years, Purdue's Anderson et al. (2002) asked five subject bibliographers to analyze the titles acquired via the program and to compare them to similar titles acquired via traditional means. Anderson and her co-authors found, depending upon the discipline in question, that between 80% and 99% percent of the books acquired via POD would have been acquired through normal means, assuming sufficient funding; that the program's results provided a great deal of insight into the interdisciplinary interests of several departments; that most included departments ordered more university than commercial scholarly or popular press books; and that, with the exception of history, students originated more orders than did faculty. Interestingly, the bibliographers noted that a percentage of the books that they hypothetically would have rejected would have been rejected not for their lack of merit but for their being too interdisciplinary to suit any one particular subject collection, and they also noted that patrons showed a marked interest in interdisciplinary studies and in subjects outside of their nominal subject domains, while the bibliographers tended to prefer titles that fell more easily into traditional classification ranges. Lastly, the bibliographers also reaffirmed that the Books on Demand monographs circulated more than did approval books and firm-ordered monographs. In the following year, Ward, Wray, and Debus-López (2003) published an article that presented two models of POD, with the Purdue and the University of Wisconsin-Madison programs as exemplars. The latter initially functioned more as a failsafe for ILL than as a purely patron-request-driven collection development tool, as items were purchased only after ILL requests were not filled by the first five libraries queried, but this model was later abandoned in favor of the Purdue model. The article reported on the workflow mechanisms and processes of the programs and on the effectiveness of the two models in terms of

turnaround time, average cost per book, and patron satisfaction. The article also touched on circulation rates and purchased monographs' perceived relevance to the collection. The above co-authors and Allen (Allen et al. 2003) also published a similar, although shorter, review in the same year that included the experiences of the Thomas Crane Public Library (TCPL) in Quincy, Massachusetts, a program started in 1998. The outcomes for all three programs were comparable to those reported in Ward's original article – excluding, of course, the population and subject/genre characteristics reported by TCPL – with perhaps the most noteworthy difference being that the average number of books purchased per patron had increased between articles from 1.6 to 2.23 to 2.4 at Purdue (Ward 2002; Anderson et al. 2002; Ward et al. 2003).

During the following year, two more programs made appearances in the literature. Hulsey (2003) authored a very short piece on the program at Willard Public Library in Michigan, which had allocated $35,000/year for POD purchases since 2000. After a year of using document delivery for article requests, the library began purchasing out-of-print books via POD, as well. Hulsey noted that the prices for most POD materials had been low ($10-$15) and that delivery had been speedy. Houle (2003, 2004) delivered papers on the program at the Schulich Library of Science and Engineering at McGill University, which had a budget of $10,000cad in its initial year and a budget of $40,000cad in subsequent years. When starting the program, Houle conjectured that it should benefit the collection by adding titles likely to circulate multiple times, should reduce the ILL staff's workload, and should be more cost-effective than ILL. After a brief presentation of the program's selection guidelines and an enumeration of its general processes, Houle presented the program's outcomes: average requests per user were 2.9 books; users making requests made up just 23% of the library's patron population; 80% of users requested three or fewer books; engineering faculty requested books considerable more than did science faculty (Houle noted that engineering's monograph budget was smaller); graduate students accounted for 67% of requests; a sizeable portion of requests were for older materials; 12% of rejected requests were for materials already in the collection; turnaround time averaged just over five days; and books purchased via the program circulated at a higher rate than could be expected of approval and firm order books (50% circulated at least once, 17% circulated five or more times, and as a group the ILL requested books averaged 2.9 circulations per book). Despite evidence of some excesses (one user had requested 62 books), Houle, unsurprisingly, was heartily in favor of the POD service.

In 2004, at least five more programs surfaced in the literature, four domestic and one international. Badics (2004), of Eastern Michigan University, authored a short piece on his library's "marriage" of Acquisitions and ILL. He noted, as had Perdue and Van Fleet, that the implementing of POD had forced a review of procedures that had led to increased efficiencies and the elimination of some tedious tasks, that it had improved staff morale and that it had eliminated some wasteful borrowing practices. Bombeld and Hanerfeld (2004) published a short article on a test program at the University of North Carolina at Wilmington. After having addressed the program's rationale, budget, procedures, and parameters, the authors reported the following: that the test program's funding had run out near the end of its term and had had to be doubled; that most requests were from faculty members, followed by requests from graduate students and then by requests from undergraduates; that the average turnaround and delivery time was thirteen days; that the average cost per item, excluding labor costs, was just $13.49 higher than the mean ILL borrowing cost reported by Jackson in 1998;4 and that items requested and purchased via ILL had circulated to an extent that warranted an exclamation point. Brug and MacWaters (2004) published a similar article on Colorado State University Libraries' (CSUL) Purchase Direct program. The CSUL-reported turnaround time was considerably better than that reported by Bombeld and Hanerfeld (7.48 vs. 13 days), and the authors' report on the items' circulations was similarly positive: at the time the article was written, 36.5% of the books were still checked out to the original requesting patrons, and over 27% of Purchase Direct books had circulated multiple times. Reed (2004) also authored a similar short article on the trial ILL POD program at the College of William & Mary. After an analysis of the year prior's ILL data had been completed, parameters for the trial were set and procedures similar to those employed by several of the other programs discussed herein were

adopted. Unfortunately, as the program had just been initiated during the year that the article was published, Reed had as yet no data to report or analyze. Lastly, for 2004, Chan reported on the first such program with an international scope, the University of Hong Kong (HKU) Library's Overseas Book Loan Initiative, which was implemented "to purchase interlibrary loan requests for locally unavailable monographs instead of borrowing them from overseas" (p. 24). Chan's article discussed in some depth the unique local factors and circumstances at HKU, presented the rationale and model for the program, and then provided an analysis of the 345 titles purchased according to four factors: "speed, subsequent use, content appropriateness, and cost of transaction" (p. 24). With respect to speed, Chan found that, contrary to expectations, overseas purchasing turned out to be, due to several factors, slower than overseas borrowing. With respect to cost, Chan found that unit costs for purchasing were roughly double those for borrowing (Chan noted that they would have been even higher had the fastest available shipping services been used). As far as subsequent use was concerned, Chan reported results similar to those already presented in this review: 55% of purchased items were used more than once, "with 26% used 2-3 times, 25% used 4-6 times, and 4% used 7-10 times," with an average 2.6 uses per item (p. 31). An examination of the purchased items' Dewey numbers by subject librarians showed the bulk of the titles to be within the scope of the collection, although format turned out to be an issue as just over 30% of the purchased titles were theses and 10% were foreign language titles that would not normally have been acquired. Just 18 of the titles were deemed to fall outside of scope for the HKU main library's collection. Thus, Chan concluded that the test program fulfilled four out of five of its objectives, with only turnaround speed proving problematic, and she recommended HKU's model to libraries engaged in overseas borrowing.

Although 2005 appears to have been a fallow year in the library literature on POD, the year 2006 saw a renewed outpouring of articles. Comer and Lorenzen (2006), in a paper presented at the Charleston Conference in 2005 but published in the following year's proceedings, discussed Indiana State University's (ISU) several test runs of their program, which had begun in late 2003. The purpose of the ISU program had been to experiment with faster and more efficient means of getting materials to patrons, so the program initially involved requesting books through ILL and purchasing them simultaneously in order to compare methods, but this dual ordering was later abandoned when purchasing proved to be faster in most cases. ISU tested several sets of purchase criteria in setting up their program and encountered a few processing- and rationale-related difficulties, but generally found the program to be a viable success and to be useful for testing the efficiency of library processes and vendor performance. The authors conducted two tests of their system and found the following: turnaround time was eight or nine days; the average cost per book was $25 and $36 (with a $100 price ceiling), respectively; and patron response to the program was positive. Ruppel (2006), then at Southern Illinois University Carbondale (SIUC), reported in her article the findings of a study of 574 education and psychology monographic titles requested in 2004. As was the case with previous studies of ILL borrowing, Ruppel found that requested titles tended to be inexpensive, of high quality and suitable for addition to the collection, and to be in print and easily obtained (60% had been published in the three years prior), and she advanced the recommendation, based upon her findings, that SIUC and other academic libraries should develop POD programs. Coopey and Snowman (2006) published a short article that described the purchase guidelines, problem analysis and rationale, pilot project, and subsequent full implementation of Pennsylvania State University Library's ILL Purchase Express program, which converts ILL requests into rush purchase orders via Yankee Book Peddler (YBP). When first exploring their program, Penn State's librarians initially tested and eventually rejected the University of Wisconsin-Madison model. In reviewing the data from their early tests, they discovered that many of the requested titles that would have been ordered through the program had eventually been acquired through the YBP approval plan, so they decided to attempt to coordinate their ILL and Acquisitions departments' efforts and acquire ILL-requested approval-plan-eligible books quickly enough through rush ordering to satisfy ILL requests. The results of a three-month user survey that accompanied the Penn State pilot program were extremely favorable, and the subsequently implemented full program has proven to be successful, with quick delivery

times, no evidence of abuse by patrons, and costs comparable to those for normal acquisitions and for ILL borrowing of returnables. Finally, for 2006, Campbell authored an article on the Washoe County Library System's year-long trial (conducted during the 2003/2004 fiscal year) of a POD program. The purpose of the trial was to determine whether purchasing books requested by patrons would be more cost-effective than borrowing them through ILL. In her article, Campell listed the criteria for the trial program and discussed the ordering of the criteria-meeting 105 books purchased during the trial. She also discussed the tracking of their performance. Campbell found that the average cost of acquiring the titles to be just a few cents higher than Jackson's 1998 estimate for ILL borrowing transaction costs; that the acquired books had circulated seven times on average, with a high of nineteen; that fiction was the most purchased type of book, followed closely by social science titles, technology titles related to health and illness, and juvenile/young adult titles. She also reported that, in the program's second year, the average cost-per-title had increased by just fifty-four cents.

In 2007, Alder authored a discussion of guidelines, workflows, and successful procedural strategies for POD programs, using as her example Brigham Young University's Interlibrary Loan Direct Purchase procedure, which handled "faculty requests for books that cannot be obtained from any lending library" (p. 10). The items ordered tended to be either gray literature or items too new for ILL. Foss (2007) wrote an article on the six-month-long, $15,000 pilot program at the University of Florida, which was undertaken in response to increases in ILL borrowing and document delivery requests that were at least partially caused by an increase in new degree programs and that were coupled with a flat collection budget. In addition to providing the program's rationale, Foss discussed its guidelines and criteria and enumerated its workflow. From statistics recorded during the pilot, Foss discovered that most requests were made by graduate students, followed by faculty (undergraduates were only allowed to request books listed as lost in the library catalog); that the majority of requests were purchased for patrons from humanities and from social science departments; that the average turnaround time for purchases was roughly five days; and that patron response to the POD service was largely positive. Cornell University Library (2007) also reported on a pilot project conducted in October of 2006. The pilot employed selection criteria and workflows similar to those recorded elsewhere in the literature (it was, in fact, modeled on Purdue's Books on Demand program) and reported roughly similar results: the pilot had 45 titles that met its purchase criteria, of which 11 were university press titles; most of the titles were recent imprints; the average cost per title was $43.90, with humanities ($32.00) and social sciences ($39.00) titles costing, on average, less than science and engineering titles ($58.00). Interestingly, unlike with other pilots conducted at other large universities and colleges, as many science and engineering titles (16) were requested as social sciences titles, and both outnumbered humanities titles (13). Of course, the above were merely the results of a short pilot, so it would be too soon to say whether this state of affairs would continue. Unfortunately, the pilot was not far enough advanced to provide detailed information on circulation, cost-per-transaction, and so forth.

Zopfi-Jordan, in 2008, published an article on the POD program of the Interlibrary Loan Department of The University of Minnesota Law Library, which purchased inexpensive books and articles (i.e., cost of the item plus shipping of $20 or less). In his article, Zopfi-Jordan set out the program's criteria for purchase and discussed the potential benefits of several processing options presented in the library literature. He also reported that 33% of purchased items that had also been added to the collection had had subsequent circulations. However, it would appear to the author that the extremely low price ceiling for the program had a suppressive effect on acquisitions, as only 12 items had been acquired. Zopfi-Jordan's statistics, therefore, are likely not indicative of the program's potential.

In 2009, three more POD articles were published, two of them describing rather unusual programs. Firstly, Way authored an article on the program at Grand Valley State University (GVSU) in Michigan. Way discussed GVSU's motivations for creating their pilot program, the development of its guidelines, its subsequent full adoption and

modification (e.g., media were later included in the program), and the later review and assessment of the program and its purchases. Through the program review, Way discovered that, unusually, faculty made the majority of requests, followed by undergraduates and then by graduate students; that 41 of the 144 purchased items had circulated more than once; and that the average number of circulations was 1.5 per item, with the highest-circulating item having had 9 circulations and with 12 items having never circulated. Way also analyzed the appropriateness of the acquired items for the GVSU collection. Rather than ask subject librarians to assess items' suitability, as Anderson et al. and Chan had done, Way used peer institutions' holdings of the items as a benchmark. He found that "59% of the purchased titles were owned by at least one of the peer institutions and that 36% of the titles were owned by more than one" (p. 305), which was roughly equal to the results for a control group of titles purchased through traditional means. Way's analysis found that titles acquired via ILL purchasing circulated at a higher rate than did titles purchased via traditional channels, that titles also owned by peer institutions were more likely to circulate than those not owned by peers, and that items owned by two or more peer institutions circulated more than those owned by just a single peer. Lastly, Way noted that, with the program's guidelines in place, undergraduates selected appropriate titles for the collection roughly as well as did faculty. Gibson and Kirkwood (2009) reported on the unusual program at the University of Arkansas Library. After a study of ILL article requests discovered that patrons had requested a sizeable number of papers from the *Materials Research Society Proceedings* and an inquiry into the cost of a subscription proved it to be prohibitive, the authors initiated a POD pilot project for just the irregularly published volumes of this single series. Despite the service's idiosyncrasy, some of its favorable results mirror those of the broader programs discussed herein: purchased volumes arrived within five days on average; the total cost of the volumes purchased ($2,390) was considerable lower than would have been the costs of subscribing during the trial interval and was lower than would have been the cumulative ILL fees for borrowing the requested volumes (roughly $10,000 for either); some of the volumes purchased via the POD pilot experienced repeat circulations (12% had circulated a second time); and the purchased volumes had an average use of 1.7 per volume. Bertuca et al. (2009) published a paper on an even more unusual pilot program involving The University at Buffalo (UB) and Empire State College (ESC). The pilot was intended to test the efficacy of providing UB materials directly to ESC faculty and graduate students distributed throughout, and even beyond, the state of New York, and it had a POD component that resulted in ESC affiliates purchasing materials that would be added to UB's collection upon return. As one might expect, given the program's uniqueness, the bulk of the article was given over to discussing the logistics of the program, but the authors did touch upon some of the POD benefits experienced, benefits that by now should seem quite familiar: the average price of POD books was fairly low ($41.59, with an average shipping cost of $10.66); the ESC faculty were enthusiastic supporters of the pilot (one called the program a "godsend" in an open letter) and were happy with the direct delivery of books via Amazon and UPS; and UB staff were overwhelmingly pleased with the program, as well. Unfortunately, analysis of whether the ESC POD materials experienced subsequent circulations once returned to UB was still underway when the article was published, so no conclusions could be made concerning heightened use. However, the authors did note that the peculiar pilot's success had led to the development of a UB in-house POD program, too.

The year 2010 saw the publication of an article on the addition of dissertations and theses to East Carolina University's POD program for monographs, a presentation on a pilot program at Oregon State University (OSU), and the publication of a special issue of *Collection Management* devoted to patron-driven acquisitions. In the former, Gee and Shirkey (2010) reviewed the Joyner Library's Interlibrary Loan Department's program for purchasing patron-requested dissertations and theses that could not be borrowed from other libraries nor be found freely available online. The program purchased both print and electronic copies, which were then, after a review by collection development librarians, added to the library's holdings and made available for checkout/access. After an outlining of the ILL and extensive collection development/retention processes employed, as well as the program's selection criteria, the authors presented their findings: storage costs for electronic items came to 15

cents per year per item, and binding costs for print copies were approximately $10.00 per item; recent dissertations that were purchased were sometimes, though infrequently, later found freely available via institutional repositories; electronic items, in order to avoid licensing and copyright difficulties, had to be placed on a server with limited access; graduate students' requests resulted in by far the largest number of purchases, more than four times as many as faculty requests (note: undergraduate requests were excluded from the program in its second year); education, whose college is one of the largest on campus, produced the most purchases (45 patrons and 172 items), but purchases were distributed across patrons in the social sciences, humanities, and sciences, as well; the majority of patrons requested just one item, but there was some evidence of excessive requesting (i.e., single patrons requesting 23, 13, and 11 items, respectively); most of items were dissertations (just 14 purchased items were master's theses; 331 were doctoral dissertations); the majority of items were fairly new (i.e., published in the five years previous); and few of the items (< 20%) had to be rejected by a collection development librarian as not suitable for the collection. The authors also remarked that, for the overall ILL POD program for monographs, the budget had had to be increased from $5,000 to $15,000 (with an additional $5,000 for standards documents) over the past four years and that, because of the current budgetary situation, the program was threatened. Unfortunately, the program did not have a method for tracking subsequent use in place, so no use/circulation data was available for analysis.

In a presentation on OSU's pilot, Hussong-Christian and Goergen-Doll (2010) discussed their purchase criteria and guidelines and their workflow procedures, which were largely influenced by the programs previously discussed above, and they then presented their findings: at the one-year mark, items had circulated 1.6 times (range= 0 to 6), versus 0.5 times for items purchased through traditional avenues during the trial period; a much higher percentage of POD items had experienced multiple circulations, and, for items experiencing multiple circulations, 89% of those subsequent circulations were not renewals; 56% of patrons responding to a satisfaction survey indicated that the POD items were ones that they would want to borrow again, while just 10% indicated that the POD items would not be worth borrowing a second time; similar percentages indicated that they would or would not recommend the POD title or add it to a reading list; patrons gave the program an average 4.74 overall satisfaction rating on a five-point Likert scale (four questions); and content analysis of patron feedback indicated that it was predominantly favorable.

In the keynote articles of the special issue of *Collection Management*, the librarians at Purdue University revisited their earlier studies of the Books on Demand program and re-analyzed it after a decade of operation. In the first article, Anderson et al. (2010) revisited the 2002 study and re-analyzed the books purchased in the six top-requesting subject areas, all liberal arts disciplines, which had accounted for 65% of the total requests for the 2000-2009 interval. The authors were surprised by a number of their findings. For example, the authors had expected use of the service to increase as it became better known, but this was not the case. The authors were also surprised that the six departments in question had continued to dominate the program's purchases despite Purdue's strong science and technology focus (58% of students were enrolled in science/technology fields; only 37% were enrolled in liberal arts). Perhaps most surprising was that 82% of POD titles fell into liberal arts call number ranges, and only 13% fell into science/technology ranges. As with the 2002 study, the authors found that graduate students made the largest percentage of requests in five of six departments and that undergraduates comprised a very small percentage of requestors. The authors also found that 79%-93% of purchased items, depending upon the requesting department, were in scope for the collection, and all but 5% were of sufficient scholarliness. They also noted that, when departmental affiliations and call numbers were reviewed, cross-disciplinary research appeared to have increased since the 2002 preliminary study and to have come from some unexpected quarters. The authors once again found that patron response to the program, collected in the spring of 2002 and of 2008, indicated that books had arrived in a timely fashion and were deemed useful additions to the collection (90% in 2008). Lastly, the authors noted that the program was an excellent avenue for graduate students, who were among the more avant garde

researchers, to provide input into collection development, although they did caution against leaving collection development too much in the hands of patrons.

In the second keynote article, Stowell Bracke (2010) focused on POD books in the areas of science and technology. She noted that roughly 15% of the nearly 10,000 POD titles purchased by the program over the decade prior had been science and technology titles. In analyzing the data set, she concluded that most of the POD books were suitable for the collection (only 4% were deemed inappropriate). She also noted that many of the books were interdisciplinary in scope, both between sciences (e.g., biology and mathematics) and between sciences and social sciences. With respect to circulation, she found that just 17% of POD books had failed to circulate beyond their initial ILL circulation, despite one-third of the books having been owned for two years or less, and that 36% of the POD titles had circulated five or more times. She also noted that the program had helped to develop "underrepresented, interdisciplinary, and emerging areas of the science and technology collections" (p.147), had helped to identify a niche interdisciplinary publisher that might have been overlooked by liaison librarians and the approval plan, and had served numerous users not affiliated with departments served by liaison librarians, remarking that "[r]equests came not only from departments . . ., but from more than 100 different interdisciplinary and administrative units" (p.148). Stowell Bracke was not able, however, to discover why so small a percentage of filled requests were going to science and technology disciplines, although she was able to eliminate the books' prices as a factor.

In the third and final keynote article, Nixon and Saunders (2010) reviewed the POD titles' circulation statistics. The authors found that the circulation advantage of the Books on Demand titles over the books acquired normally during the same interval (excluding gift and reference books) was quite large (mean circulations of 4.114 and 2.410, respectively, after first ILL loan was included and 2-hour reserve circulations were removed). They also noted that just 18% of POD titles had failed to circulate after addition to the circulating collection, as opposed to 33% of regularly acquired books. In analyzing the users of the books, they found that the university's researchers (faculty and graduate students) used POD titles at a roughly 50% higher rate, but that undergraduates used POD and traditionally acquired books at roughly the same rate. Rather interestingly, they also found that POD books requested by undergraduates had the highest average circulation, those requested by faculty had the lowest, and subsequent users of POD books were most likely to use books that had been requested by the same type of patron. Graduate students, the predominant purchasers, had made the heaviest use of the titles requested by all other patron types, excluding undergraduates' use of undergraduate-requested titles, and science and technology titles had the highest average rates of circulation.

In addition to the keynote articles, the special issue published a number of additional articles on POD programs for print books and similar materials. Tyler, et al. (2010) reported on the first five years of a POD program at the University of Nebraska-Lincoln (UNL). Analysis of UNL's patron data revealed that graduate students (48.8%), followed distantly by faculty (25.1%), were the program's main users and that requestors were fairly evenly split between the social sciences (34.1%) and the arts and humanities (32.3%). The authors analyzed UNL's acquired books in terms of their avenue of acquisition (e.g., approval plan, librarians' firm orders, donors' bequests, lost book replacement, and ILL POD) and found that POD books had significantly higher rates of annual circulation than did each of the other types, even when the data set was reduced to only those Library of Congress (LC) subclasses that had experienced POD orders and then further reduced to only those books from the subset that had circulated. The authors also noted that a much larger percentage of POD titles had had multiple circulations. In assessing the suitability of the POD books for the collection, the authors noted that 90.8% of the POD acquisitions fell into LC subclasses that had experienced either higher-than-average circulations (1.2%), higher-than-average volume use (12.5%), or both (77.1%). Lastly, in order to obtain a sense of the effectiveness of POD purchasing, the authors compared the use value, in terms of average prices paid per average rates of annual circulation, of the traditionally acquired books from the LC subclasses that had had POD purchases to that of the POD books,

and they found that the traditionally acquired books' ratio ($122.34:1 annual circulation) was more than twice as high as that of the POD books ($54.99:1 annual circulation), despite the traditionally acquired books' having lower average prices paid per book in the majority of the LC subclasses reviewed. When these ratios were recalculated using only the subset of circulated books, traditionally acquired books ($63.92:1 annual circulation) still performed slightly worse than did POD books.

Another article from the special issue detailed the experiences of the ILL department at the University of Illinois at Urbana-Champaign (UIUC) with two iterations of their Own Not Loan program (Silva & Weible 2010). UIUC is a member on an intra-state ILL consortium whose service (I-Share) handles requests that may be easily filled through in-state lending, so the UIUC ILL department proper usually only handles requests for esoteric or hard-to-obtain materials not held by members of the consortia. The authors concluded that the initial, 2002 pilot program largely failed because POD was limited to ILL, rather than I-Share, requests, and these items turned out to be as difficult to buy as they were to borrow. The second pilot, conducted in 2008, was more successful at least in part because the source of POD requests was shifted to the more mainstream unfilled requests of the I-Share service. In concluding, the authors also supplied a brief synopsis of how the program handled patron records and privacy concerns, data management issues, and the ordering, cataloging, and delivery process.

An innovative program model at the University of Denver also made an appearance in the special issue. In the model program, the library loaded MARC records for books for which they would have received slip notifications from an approval plan vendor into the catalog (Levine-Clark 2010). The slip records await discovery by patrons, who will be instructed that the book is not in the collection but may be purchased at their initiative and who will be offered a choice of formats (print or electronic) if a choice is available. The author remarked that the model will provide patrons with a larger list of books of potential interest and an opportunity to select books in accordance with their needs. The author also noted that there had been some concern expressed over patrons' potential reactions to the presence of records for books not owned in the catalog, over issues of fiscal uncertainty (the library loaded records for more books than it could afford), over the possibility that the library could wind up spending more and receiving fewer books because of purchases of duplicate print and e- books and because of rental fees for early accesses of e-books, and over the potential impact of demand-driven acquisitions on scholarly publishing in general. The author closed with a discussion of the library's plan for future assessment of the program and an enumeration of expected benefits.

Carlisle Fountain and Frederiksen (2010) researched the extent of the adoption of POD programs in the Pacific Northwest and found that POD programs were not widely used in the region. Those that had been implemented, they found, were at larger and public academic institutions, and many of the programs were of recent vintage. In reviewing responses to questionnaires sent out to the region's libraries, the authors discovered that most of the institutions' programs bore many similarities where workflow processes, budgets, and vendors were concerned: most employed Amazon, although not exclusively; most tapped their general book funds or set up a specific POD allocation from said funds; and, as with most of the other programs reviewed herein, the implementing libraries applied guiding criteria, which frequently included appropriateness to the collection and cost limits, to the requested books prior to placing orders. Additionally, the authors distilled a step-by-step workflow analysis for the POD programs and found a number of similarities in how programs initiated their ordering processes, but they also found some divergences of practice in programs' later steps. They also found some strong similarities in how programs' workflows handled purchased items from the point of receipt to the placement of items in the stacks. In questioning institutions without POD programs, they found that concerns over budget and over staffing and workflow were the predominant barriers to implementation. The authors closed by suggesting, based upon their analysis, some normative practices and criteria for institutions wanting to set up a pilot project.

Hodges, Preston, and Hamilton (2010) reported on an ILL POD program (as well as

two tests of an e-book POD program) at The Ohio State University Library (OSUL). The OSU program grew out of a test program conducted in 2008 that had linked OSUL's homepage to the WorldCat database, with an option to request items not held at OSU via ILL. The authors reported that 26% of ILL-requested items resulted in a POD purchase, that graduate students (47%) were the most frequent beneficiaries, and that purchases averaged 16 circulations (note: the oldest item had been owned just 22 months; circulations appear to include items held on reserve). The bulk of the rest of the paper was given over to a review of the two pilot tests of the POD program for e-books.

Barnhart (2010) provided a brief on her development of a POD program unique in the literature. At University of California, Santa Barbara, Barnhart allowed students completing advanced library research courses to select books for the library's collection and to be the first users of the items thus selected. This allowed students, largely graduate, to add items to the collection that would be pertinent to their ongoing research interests. Barnhart noted that, unsurprisingly, students' responses to the program were overwhelmingly positive, if a little incredulous. Colleagues' responses, however, were more mixed, with a few not approving of the assignment and seeing it as evidence that Barnhart's collection development areas must be over-funded if she could indulge in such a stunt. Barnhart also, unsurprisingly given the current climate, experienced some budgetary difficulties. After her initial successes, she experimented with the program outside of credit-bearing library research courses, with largely similar positive feedback from students.

Lastly, to close the special issue, Reynolds et al. (2010) reported on the program at Texas A&M University (TAMU). According to the authors, TAMU had been purchasing monographs via ILL since the mid-1990s and had had a Suggest a Purchase form on its Web site for several years, but in 2006 the TAMU librarians had decided "to expand its user-driven acquisitions program in conjunction with an effort to simplify its acquisitions fund structure" (p.245). As a result, six percent of the monographic budget was set aside to automatically purchase materials requested by TAMU affiliates, in essence allowing affiliates to behave, up to a point, as though they were librarians with selection responsibilities (note: items costing more than $150 and not already owned were reviewed and approved by subject librarians). The authors conducted two satisfaction surveys for the program. The patron survey revealed that 97% of respondents were satisfied with the service, with 61% reporting that they were very satisfied. Ninety percent responded that materials arrived in a timely enough manner, although a few did complain that materials sometimes arrived too slowly to meet course-work related deadlines. The authors also learned that 79% of respondents had used the service more than once, but there was proportionally little evidence of abuse, as just 5% of respondents indicated that they had used it more than 25 times. With respect to desired formats, most patrons (87%) had requested print materials, but a sizeable percentage (38%) had requested video or DVD. When questioned as to the purpose of their requests, 61% indicated that they were for research purposes unrelated to a course, but recreation was the second most frequent response (29.9%). The authors determined that the major users of the service were faculty and graduate students working on research. The results of the survey of librarians produced more mixed results. A sizeable percentage (48%) acknowledged that their fears that the program would result in budgetary havoc caused by a patron-initiated spending spree had proved to be unfounded (note: 35% indicated that they had had no such fears). A majority (62.5%) agreed that most of the requested items had aligned with current collection development policy. Overall satisfaction with the price cap policy, the workflow processes, and the communications processes was fairly high (80% satisfied or very satisfied). In analyzing the requests, the authors found that 9,828 of the 13,127 Suggest a Purchase requests had been filled, most by the user fund but some by the approval plan. Suggestions not honored were largely for items already owned, items not yet published, or items that required ongoing subscriptions. The authors also found that the number of requests had increased greatly over the three-year interval (note: librarians were promoting the service). Somewhat unusually, faculty requests (44%) outnumbered requests from graduate students (27%). Undergraduates made a noteworthy number of requests (19%), followed by staff (9%). At the time data was

analyzed, nearly 78% of the acquisitions had circulated, and nearly 40% had circulated more than once (note: this includes circulations of reserve items).

Conclusion

It is to be hoped that the rather lengthy summary review of the numerous case studies above points the reader toward some potentially useful programs upon which to model a program and inclines the reader both toward loosening library collection development policies a bit so as to included patrons as selectors and toward attempting a pilot POD program. This review should show that POD programs have provided excellent PR for libraries and have improved staff morale and led to greater efficiencies in some instances. Also, as the above has indicated, POD programs seemingly guarantee the addition of books to a collection that experience higher than average rates of circulation and that experience multiple circulations, a benefit not to be cavalierly dismissed after a decade of rising collection expenditures and diminishing circulation transactions (American Library Association 2009).

There was some evidence in the literature that POD books cost slightly more, perhaps because of a lack of vendor discounts, but the literature also suggested that this potential difference in average price ought not to dissuade libraries from implementing a program as POD books produce a better return on investment, at least in terms of cost-per-transaction and/or prices paid per annual circulation (Perdue & Van Fleet 1999; Tyler et al. 2010). The literature has also shown that ILL POD books can usually be supplied in a timely-enough manner and that, with some guiding criteria in place, patrons do well at selecting collection-appropriate books. There was some evidence in the literature of patrons abusing POD services by requesting excessive numbers of books, so perhaps a limit on the number of requests per patron per year should become a common program parameter. Regardless of the fine details of program criteria, however, this review should have helped establish the value of the patron-initiated POD model.

Suggestions for Further Research

The scope of potential future research of POD is very broad, but there are one or two particular areas of interest that appear to the author to have been neglected. Perhaps the most glaring omission has been a cost/benefit analysis of the programs. As noted above by Perdue and Van Fleet (1999) and Tyler et al. (2010), the ILL POD books seem to provide a more effective return on investment, and this is a topic that warrants more in-depth research (e.g., identifying differences in benefits across disciplines, avenues of acquisition, and so forth), but more significantly, none of the authors above provided a full cost/benefit analysis of their own programs nor compared costs across the various sorts of programs. Each program has had features that may have an impact on program-associated costs. A cost/benefit analysis for a single program or a comparative, cross-program analysis would do much to help identify best practices for the field.

Several of the studies also noted potential abuses by patrons or potentials for abuse. The article from Texas A&M answered the issue of extravagant spending by patrons, and the articles from Purdue, University of Nebraska, Grand Valley State University, and Hong Kong University Library handled the issue of the POD books' suitability, but several of the articles noted excessive ordering by some patrons. It may be worthwhile to further investigate POD's potential for abuses such as excessive ordering, the ordering of books on eccentric subjects, or patrons' potentially monopolistic use of the books they order. The programs reviewed above did not seem to have experienced much abuse, but this is an area that could prove fruitful for the future, especially for those programs wanting to refine their guidelines and criteria.

Lastly, several of the articles noted that the POD programs have been relatively small (roughly 1% - 6% of libraries' monograph budgets), and a few noted that there could be diminishing returns associated with increases in program size (Anderson et al. 2010;

Nixon & Saunders 2010; Tyler et al. 2010). As the above authors caution, programs of this sorts are an excellent complement to traditional collection development modes, but they are not and should not be seen as a replacement for libraries' traditional collection development practices. Still, it would be interesting to see just how much of a library's collection budget could be given over to patron-initiated POD before the beneficial effects noted above began to significantly diminish or disappeared entirely. This last, the author is afraid, likely would be an experiment for which it would be difficult to generate much enthusiasm in one's library administration.

Endnotes

1. So much so that, for example, the editors of *Library Journal* noted that early critics of blanket order plans decried them for their taking away librarians' "most important professional responsibility—the selection of books" (Greenway 1990, p. 80).

2. The authors cannot do justice here to the extensive scholarship on this subject nor summarize it succinctly. The course of the debate in the latter half of the twentieth century actually began inauspiciously: in an early study on whether ILL requests could be used to determine whether and which journal backfiles should be purchased, Graziano concluded that "the chance that any particular title be requested more than once is largely accidental and that this type of analysis is of limited value as a selection aid for specific titles" (1962, p. 254). This conclusion was immediately endorsed by Wilson (1962), who had conducted a similar study. Their conclusions were later contradicted by Wender's (1969) study of the ILL borrowing of behavioral science serials at a medical library and by New and Ott's (1974) study of ILL serial and book borrowing at California State University, Fullerton. Wender concluded that analysis of ILL records could be used to determine which serial subscriptions and backfiles to acquire, and New and Ott concluded that such analysis could guide budget allocations for book-purchasing at the Library of Congress subclass-level and be used to determine which serials warranted subscriptions and possible backfile acquisitions. Unfortunately, New and Ott's study was met with a negative critical response: Drott and Griffith (1976) complained that New and Ott's conceptual model was far too simple and noted that they had mishandled the occurrence of non-requests; McGrath (1976) noted that New and Ott had committed several arithmetic errors and may have mishandled their statistical calculations. However, despite Rottmann's (1991) later assertion in a review article that New and Ott had been soundly refuted, their methodology, rationale, and its underlying argument for the utility of ILL requests as a tool for collection development, management, and assessment appear to have been tacitly adopted and widely promoted by librarians (see, for example: Pritchard 1980; Byrd et al. 1982; Roberts & Cameron 1984; Aguilar 1986; Beaton & Kirk 1988; Jackson 1989; Williams & Hubbard 1990, 1991; Lahmon 1991; Khalil 1993; Murphy & Rupp-Serrano 1999; Schulz 2001; Ochola 2002; Livingston & Mays 2004; Mortimore 2005; Mouyal 2005; Knievel, Wicht, & Connaway 2006; Ruppel 2006; Burchfield & Garewal 2009; Gibson & Kirkwood 2009).

3. Of course, POD has not been limited to printed materials, and a similar literature concerning POD for electronic books, or e-books, e-articles, and e-theses and -dissertations appears to be rapidly growing in parallel to the literature on POD for print books. Interested readers should consult the appropriate indexes.

4. That same year, Jackson had reported the mean cost of user-initiated ILL borrowing to be $17.50, so Bombeld and Hanerfeld's average cost was actually just $12.66 above the then-current mean (Jackson 2004).

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