Managing Your Research Pipeline

Matthew J. Lebo, *Stony Brook University*

ABSTRACT A researcher's "pipeline" refers to the progression of papers from the idea stage to the publication stage. Tenure-track faculty and graduate students often are advised that a busy pipeline is the way to tenure. However, beyond the simple encouragement to "work harder," "write more," and "publish more," not much direction is given to junior scholars regarding how they should think about and manage their research pipeline. How does one develop a large number of papers from their first stages to the pages of respected journals? This article discusses the author's system for pipeline management. The system works (1) by separating the difficult exercise of publishing a paper into eight manageable stages; and (2) by organizing a set of papers using these steps according to a practicable timeline.

Some tasks seem significantly more difficult when thought of as a whole rather than as the sum of their parts. Each fall, new tenure-track assistant professors are confronted with the fact that they must publish a certain number of papers within five or six years or be denied tenure.[1] Beginning a new job with new teaching and service responsibilities can make a large quantity—for example, 10 publications at a research-intensive university—sound far out of reach. How can such a monumental task be approached? My system examines this as a longer series of small hurdles that are more easily cleared. Although separating goals into "micro-goals" is not a new concept, this article outlines a system that compartmentalizes the publication process, creates a point system for micro-goals, and provides a method for timing the micro-goals and assessing progress. By following the system, tenure-track professors can establish a weekly schedule of activities to monitor their overall progress.

The article outlines points on work habits, discusses the division of a publication into eight stages, and offers advice on how to progress from one stage to the next. The point system for keeping track of progress is described along with other suggestions to manage one's progress to tenure.

THE TENURE CLOCK AND GETTING STARTED ON YOUR PIPELINE

Before elaborating on my system, it is worth emphasizing to new assistant professors that, first and foremost, you should be establishing yourself within the scholarly community. New faculty members begin with a completed dissertation and a small network of professional connections. As you follow the steps in this article, it is important to remember that—other than maximizing publications—the goal is to build a body of respected research and situate yourself within a small community of scholars. Networking within your university, department, and at conferences, as well as trading working papers with others in your field, are important in developing your profile.[2]

Moreover, ensuring that your various research projects form a coherent body of work can be helpful. For example, when the appropriate tenure letter writers appreciate the value of all of your work, they can write more compelling letters. Becoming an important researcher in your particular subfield is what tenure letter writers often look for and reward. Keep these points in mind while following the system outlined here, which deals primarily with how to lengthen your CV.

To start the pipeline-management system, there are two essential requirements. First, you need numerous ideas, papers in progress, and/or dissertation chapters—designating each as a "project"—or you need to be making progress toward having them.[3] The number of projects soon after beginning your tenure clock should be at least as many as are needed to obtain tenure at your institution—that is, if everything is published. To be safe, you should have several other projects or potential projects to allow for some to fail in the process.[4]

In terms of timing, you should have at least the idea for every project by the end of your third year on the tenure clock (assuming it is a five- or six-year tenure clock). A project that is started in the fourth year is unlikely to be accepted in time for your tenure file to be evaluated. You definitely should begin projects in your fourth year and beyond; this will show those who are evaluating your file that you will be active after tenure and also get you started on your promotion from associate to full professor. However, the key is that you cannot assume that papers begun after Year 3 will be a part of your publication record at tenure.

Matthew J. Lebo *is professor of political science and director of the Center for Behavioral Political Economy at Stony Brook University. He can be reached at matthew.lebo@stonybrook.edu.*

doi:10.1017/S1049096516000160 © American Political Science Association, 2016

https://doi.org/10.1017/S1049096516000160 Published online by Cambridge University Press

The second requirement is a large dry-erase board to be used for tracking the progress of your projects. I call it "The Big Board" and it should be mounted on your office wall during the first week of your new job, if not sooner. Leave space on the right side of the board for two columns of numbers and dates that will track your overall progress. About three quarters of the left side should be arranged in a grid pattern so that each project can be listed in a separate square. For example, if you think that you will need 10 publications for tenure, leave room for 14 slots in the grid. The goal is to have all of the slots filled by the end of Year 3, listing each project that you expect will lead to publication.[5] Begin by allotting one grid square to each chapter of your dissertation which will be sent separately to journals, and to other papers already in your research pipeline. A good way to start is to have the grid at least half full when you begin your new job. As ideas for papers emerge in the first three years, fill in the remaining grid slots.[6] It is important to note that too many projects can be as problematic as too few—excess projects divert time from those already well underway. Before explaining how to keep score of all of these projects, the discussion continues with strategies for obtaining tenure through journal publications.

QUANTITY AND QUALITY IN JOURNAL PUBLISHING

First and foremost, this system is about organizing your research plan. To follow this plan to its successful conclusion, it already has been assumed by you and your department that you are capable of a sufficient number of quality ideas that can be developed into quality publications. The definitions of "sufficient number" and "quality" depend on your department and institution. The quantities in the following discussion are calibrated for a research-intensive university but can be increased or decreased to meet the tenure requirements at different types of institutions.

Based on your own talents and the expectations of your institution, The Big Board should be filled as early as possible with projects that you are capable of getting published. It is beneficial to have a few more projects than your department's general tenure guidelines. This is especially true as the competitiveness for the "Top 3" journals increases. With rejection rates well above 90%, many excellent manuscripts are rejected from the *American Political Science Review (APSR)*, *American Journal of Political Science (AJPS)*, and *Journal of Politics (JOP)*. Running the gauntlet of sending a manuscript to all three in succession will take an enormous amount of time. Nevertheless, many departments place a premium on these three journals and have historically been harsh on tenure records without any publications in them. In these cases, department standards must evolve past this expectation; it is simply too easy for a quality scholar to be repeatedly rejected at these outlets.

However, to guard against senior faculty members in your department who do not appreciate the ever-increasing difficulty of placing work in the Top 3, you must pursue a strategy that will make it difficult for them to turn you down even if you do not hit these outlets—or do so less often than desired. For example, a record of 12 publications in outlets such as the *British Journal of Political Science*, *Political Analysis*, *American Political Research*, *Public Opinion Quarterly*, and other journals with roughly 90% rejection rates indicates a very productive scholar.[7] Certainly, such a record would be a "slam-dunk" in most departments if it included an *AJPS* or an *APSR* publication. To summarize, if you are in a department that expects Top 3 publications (or other difficult targets), you will need a record that is good enough so that even if you miss, it will be difficult to turn you down—and, if you are denied tenure, you will be a prime target for hiring departments. The way to build such a record is to have enough work in your pipeline and to leave yourself enough time so that when you have given up on one paper making it to a top outlet, you still have time for multiple attempts at other solid journals.

The next section defines the eight stages (and seven steps) of a project on the way to being published. As Covey (1989) suggested, "Begin with the end in mind."

THE EIGHT STAGES OF A PUBLICATION

Each publication begins as an idea and ends with an acceptance letter from a journal editor. The progress of a publication typically passes through all of the following stages.

Stage 7

There is an idea for a paper that should include a subject area, a literature that will be addressed, and a data source. At this stage, any coauthors with whom you will be working also should agree on the scope of the project and a timetable for completing it.[8] Paper ideas with a likely low probability of eventual publication should not make it beyond this stage; time is too precious to invest in projects that will not contribute to your bottom line.

Stage 6

The paper is outlined and you have obtained your data. Whether you have accomplished a little or a great deal (e.g., collected extensive data), you now have everything you need. The sections of the paper are outlined and you have determined the hypotheses that will be tested and the arguments that will be presented.

Stage 5

You have completed a draft of the paper, including results. All sections include references and footnotes. At this point, it may be useful to have the paper read by others in the field to receive feedback.

The way to build such a record is to have enough work in your pipeline and to leave yourself enough time so that when you have given up on one paper making it to a top outlet, you still have time for multiple attempts at other solid journals.

Stage 4

The paper has been presented at a conference, which serves many purposes. Perhaps most important, having a deadline for presenting your paper will incentivize you through Stages 7–5. Presenting at a conference also will improve a paper beyond its form as a just-completed draft. Conference presentations are often the best

https://doi.org/10.1017/S1049096516000160 Published online by Cambridge University Press

way to obtain feedback on your project and perhaps learn the type of audience that is most receptive to the piece, thereby providing hints about where to submit the paper.

It is important to note that—strictly from a CV-building perspective— any paper that does not go beyond this stage is an enormous waste of time. You can invest hundreds of hours of work to advance to Stage 4; to take the paper no further detracts from all of the other projects that have been sidelined to make time for this one. I do not advocate pursuing a conference paper that has no hope of publication to the ends of the earth in search of a journal. Rather, projects in early stages that appear likely to have this fate should be abandoned as early as possible. Papers that have been presented at conferences and show promise should be advanced to the next stage. If a paper does not seem likely to land in a top outlet, you should continue to try journals further down the hierarchy—as long as you know that your department will recognize the contribution in your tenure file. A few papers in lesser-known but peer-reviewed journals can make a major difference in a tenure file.[9] To summarize, all else being equal, a conference paper that advances no further is *much worse* than no conference paper at all.[10] It simply keeps you from working on the projects that will get published. A CV that accumulates one or two unpublished conference papers every year indicates much time lost and a serious time-management problem.

In the early stages of the process, how do you know the difference between a project that eventually will be published and one that will not? Of the many possible suggestions, I emphasize only three. First, at the earliest stages—long before you write a conference paper—ask your graduate school advisors and new colleagues for their opinion about the potential value of a project. Second, once you have committed to starting a project, quickly get to know your data. If they do not have a good story to tell, writing about them will be difficult. Third, whenever possible, choose a research question so that the results are interesting, regardless of what the data reveal. That is, if both your hypothesis and your null hypothesis would make an interesting story, your project is likely to attract interest and land well. Settling controversies in the literature and finding original questions are two ways to accomplish this. Alternatively, consider whether your data address a common but untested assumption in the literature, in the general public, or in the media.

Stage 3

In this stage, the paper is under review at a journal. Depending on how much time is left on your tenure clock, you can aim high in your first try and then adjust after a rejection. However, remember how long this process can take and allow each paper enough time to be accepted before tenure—*even if it is rejected by the first second-tier journal to which you send it*. For example, a paper good enough for *Legislative Studies Quarterly (LSQ)* certainly has a chance to be published by a Top 3 journal. However, if you first try *APSR*, *AJPS*, and *JOP* before *LSQ* and then the paper is rejected by *LSQ*, you will have expended years of time and used several reviewers—yet still have a very good unpublished paper looking for a *fifth* journal to try.[11]

Stage 2

In this stage, you are offered a revise and resubmit (R&R), which is the "point of no return." After you have an R&R, you must diligently follow all of the reviewers' requests—you do not want to fall into that narrow category of papers rejected after an R&R.

Stage 1

In this stage, the paper is under review after the R&R.

Stage 0

The paper has been accepted. Congratulations! On The Big Board, write a big red checkmark next to the project and a red circled number indicating which publication this is for you. Treat yourself to lunch and then get back to work on the next project.

Although this system originally was devised for journal articles, it can be adapted to books by treating each chapter as a project. Whether to pursue a book project is a major decision and should be made in consultation with senior members of your department, who can inform you of the relative weight put on books and articles for tenure decisions. One suggestion is that while you are working on the book, send one or two chapters to journals as standalone articles. This will imprint your name on an idea as your CV progresses and your work on the book continues.[12] This system also can be adapted to a dissertation. As a first major project, few are prepared for the scope of a dissertation; therefore, time management and planning are essential (see, e.g., Trafford and Leshem 2008).

Be thorough with your revisions as well as memos to reviewers and editors that address their comments. Of all your projects, those at this stage deserve your highest priority*: they represent the highest costs and the greatest chance of increasing your number of publications.*

KEEPING SCORE

After you have written the titles of your projects in the slots on The Big Board, put blue numbers next to each to indicate its stage in the process. For any empty slots, write in "7s" and fill them in later with a project idea. When you begin your tenure clock, you already may have some zeros, but there will be several higher numbers. Next, add up all of the blue numbers and write the total with the date in the top right corner of the board. Every time the total changes, record it and the new date under the previous entry. This allows you to follow your progress. The goal, of course, is to achieve a total of zero.[13] Watching both the mean and the variance of the blue numbers over time will indicate that your CV is developing and is in balance. Ideally, the mean and the variance will decrease over time; adding too many new projects well into your tenure clock increases both and indicates that you should concentrate on completing papers in the more advanced stages.

https://doi.org/10.1017/S1049096516000160 Published online by Cambridge University Press

TIPS ON MOVING FROM ONE STAGE TO ANOTHER

Nothing → Stage 7

Put your ideas on The Big Board and begin working on them. Begin data collection early and ensure that the 7s are worth taking further.[14]

Stage 7 → 6

Analyze your data and outline the paper. If the first finished part of a draft is the section of tables, you will have a good idea of whether the paper is worth writing. Outline the paper here as well. What are the sections of the paper?

Stage 6 → Stage 5

Assuming that you are satisfied with your tables, write the draft. This can be accomplished more quickly than you might think. Set a goal of (at least) one or two pages a day so that at the end of each day, the draft is at least that many pages longer. On those days when you do not feel like writing, expand the draft by outlining the sections and even paragraphs—or work on references, figures, and tables. If a draft is only one page longer each day, it will be finished in a month.[15]

Stage 5 → Stage 4

This stage is simply a matter of reworking and editing a draft so that it is ready for a conference presentation. You should do a substantial amount of this work so that you are ready for the next step after the conference. Of course, conference presentations are not essential and this step can be omitted for some projects, especially those for which good feedback already has been offered (e.g., dissertation chapters).

Stage 4 → Stage 3

After postconference revisions, a project is ready for submission to a journal. The choice of journal, of course, is important and depends on your field. However, the time that submissions can cost is worth keeping in mind, even near the beginning of your tenure clock. Determine early whether a project has potential to be published in a general journal. It may take several submissions to specialized journals, so allow enough time for potential rejections.

Stage 3 → Stage 2

This step requires no work from you. You have submitted a paper, and an R&R offer is decided by the journal editor.

Stage 2 → Stage 1

Turning around an R&R is itself an art. To get this far and then not convince reviewers and editors to accept the paper is a major disappointment and entails a significant loss of time in addressing specific reviewer concerns. Remember, however, that this can happen; therefore, it is a mistake to leave an R&R on your desk for a long time, believing that it is as good as accepted. Be thorough with your revisions as well as memos to reviewers and editors that address their comments. *Of all your projects, those at this stage deserve your highest priority*: they represent the highest costs and the greatest chance of increasing your number of publications. They need to be resubmitted as quickly as possible so that if they are rejected, you still have time to try elsewhere.

Stage 1 → Stage 0

This is another step that, although crucial, does not require work from you. When a paper has been accepted, erase the blue number next to the project on The Big Board and then write a big red "1" to indicate the publication number of this project.

OTHER STEPS

Stage 3 → Stage 4

When a paper is rejected, what should you do with it? If after the reviews, other feedback, and your own assessment the paper is not publishable, it is best to set it aside. Doing so should be rare because you had multiple steps at which to give up and instead have decided to continue. It is more likely that you will resubmit the paper to another journal. In that case, what should you do with the reviews? Should they be given the same attention as if this project were an R&R?

My answer is "absolutely not." Many reviewer suggestions are helpful and easy to implement; several others are helpful and difficult to implement. Yet, there are many suggestions that are both difficult and not helpful. Advice can be followed when feasible, but you should resubmit the paper for review as soon as possible.[16] A good rule may be that when reading a reviewer's suggestions, be careful to separate suggested *changes* from suggested *improvements*. The former may consist of proposed new models or data of particular interest to a reviewer. Be assured that no matter how well you address these concerns, reviewers at the next journal will have their own idiosyncratic reading and set of suggestions. Other possible changes (e.g., reorganizing parts of the paper) can be time consuming without any improvement of the paper. Frequently, a reviewer at the next journal will suggest returning those parts to their original placement.

Distinguishing the suggested changes from the suggested improvements is important because getting a rejected paper back out for review is likely the second highest priority of all of the steps in the system. A good target is to always have three projects under review (3s and 1s). A bright circled "OUT" on The Big Board next to projects under review helps you to track how many projects are off of your desk.

Practically speaking, if you have a paper that must be published four years from now and a lecture that must be written by tomorrow, the two deserve equal attention today. *There always will be endless tasks during a semester, but your research agenda cannot be set aside.*

Stage 3 → Stage 0

This is when a paper is accepted without an R&R—rare, but great.

Stage 1 → Stage 4

This is a rejected R&R—rare, but awful. Respectfully ask editors about the reasons for a rejection and perhaps solicit their

https://doi.org/10.1017/S1049096516000160 Published online by Cambridge University Press

advice about what to do next. Then try to get the paper back out quickly.

TIMING

You now have a total number of points to get to zero as well as the date of when your tenure file will be submitted. Divide the point total by the number of months remaining until you submit a paper; the result is the number of points by which your total should decrease, on average, every month. For example, with 80 points and 60 months left, lowering the total by 1.33 per month will get you to zero on time. The total also can increase when papers are rejected. Therefore, setting a higher goal than points divided by months for each month is recommended, even if it is not always met.

Decreasing the points total by two points a month results in a productive assistant professor, who averages approximately three publications a year. This pace is much faster than what is required at all but a few departments. Setting your own ambitious but attainable goal is useful, and you should calibrate a monthly target based on your particular department. Whereas semesters tend to be busy, goals can be increased for summers or during semesters of research leave.

Thus, keep close track of your overall progress not only by tracking your number of publications but also your point total. For example, publishing a paper every six months sounds difficult; however, ensuring that each month decreases your overall number by 1 does not. *Decreasing your total each month should become your primary goal: if possible, put the long-term goal of X number of publications in the back of your mind.* Each month (or each week during the summer) represents a fresh start for decreasing your total. Seeing the total points decrease provides satisfaction that your work is indeed making its way through the pipeline. Journal acceptances are sure to follow.

FINAL THOUGHTS ON WORK HABITS

Even with a well-organized system, advancing your projects from the idea stage to the publication stage is a tremendous amount of work. Developing good daily work habits is essential. A general but key point was made by an assistant dean when I began my tenure clock: the long-term goals that must be accomplished deserve the same attention on a daily basis as the short-term to-do list. These long-term goals are what Covey, Merrill, and Merrill (1995) referred to as important but not urgent tasks. Practically speaking, if you have a paper that must be published four years from now and a lecture that must be written by tomorrow, *the two deserve equal attention today*. There always will be endless tasks during a semester, but your research agenda cannot be set aside. Working on multiple projects every day, even for a few minutes, will advance them through your pipeline at a good pace—and coauthors can provide assistance. To quote Glengarry Glen Ross: "Always be closing." Move your projects forward and get them out for review. Giving The Big Board a prominent place in your office is a daily reminder of your research priorities.

Write outlines and then outlines of outlines; make to-do lists and then lists of to-do lists. Any habits that you can develop to make progress every day should be followed with conviction.

This system is meant to organize the many research tasks that an assistant professor must juggle when dealing with a large research agenda. I have witnessed creative adaptations and I encourage readers to devise their own systems or to change this one if they find it problematic. The most important lesson I want to convey is that tenure should be approached with careful planning and a strategy for success. Coming up for tenure is an intimidating prospect, but success is mostly a matter of going through the daily grind of the research process in a productive way. Rethinking the goal of a long CV as a series of reasonable micro-goals is a good way to overcome the fear and get to work. ■

NOTES

1. The number of papers and the relative quality of the journals vary, of course, by department. However, given that the job market sorts candidates into departments according to their talents (with some error), we can assume that most new assistant professors find the expectations to be quite daunting.
2. A department speaker series is a good way to get senior scholars in your field and potential tenure referees to your department and into your network. Running such a series serves as double duty because it fills in the department-service section of your tenure file.
3. Generating the ideas for these projects, of course, is a hugely important but entirely separate topic. Zigerell (2011) provided 20 ways to generate research ideas from existing research; King (2006) offered valuable advice as well. Having the requisite number of ideas is certainly a difficult part of obtaining tenure. This article provides tools for those who have that ability but need help to organize their schedule and work habits. Most especially, following a timeline for micro-goals can overcome some of the more daunting aspects of the process (e.g., submitting one's work to a peer-reviewed journal).
4. Here and at many other points in this article, my numbers are approximate and can be adjusted to a specific situation.
5. By publication, I mean those papers that will count toward your tenure file. Encyclopedia entries, book reviews, and book chapters may not be given much weight at your institution; if so, they should be undertaken rarely. If they would be given full credit, then certainly include them in your projects.
6. As you advance further into your tenure clock and those blank spaces remain, you should seek out potential coauthors—especially those with data in hand. These projects can make rapid progress, often without taking too much time from your other projects. Remember that at the midway point on your tenure clock, there is a chance that the projects you are just beginning may not be accepted prior to your file being submitted. Time spent on them can be at the expense of projects closer to completion.
7. Everyone will evaluate a tenure file differently. There can be discounting based on coauthoring, especially with advisors, and different schemes for weighting publications. What is most important in ambiguous cases is that the faculty wants to say yes—several years of good teaching, service, grant-seeking activity, and collegiality will best serve you in this. One faculty member might look at a file and say "too much coauthoring," whereas another says "look at all the good people who want to work with her." The only difference between the two may be the underlying affect for the candidate (see Fisher et al. 1998 on coauthoring).
8. When and how to work with coauthors is a complicated topic. Two issues are relevant to my purposes: (1) I suggest that the order of coauthors be decided in Stage 7, which will establish the relative workloads; and (2) having many coauthors on your projects should lead to an increase in the number of publications that you are pursuing.
9. This can be especially true when your tenure file reaches your university's Promotion and Tenure Committee (PTC). Members of PTCs, for example, may not know the difference between the *American Political Science Review* and the *International Political Science Review*, but they will all know how to count.
10. Additional benefits of conference presentations (e.g., networking and exposure) may be important but they are not the main concern; they are most likely outweighed by the opportunity costs of the progress not made on other projects.
11. When calculating how much time it takes to go through multiple journals, do not simply add up the time from Submission Day to Decision Day. Rejections usually come with feedback that you will use to revise the paper; when you eventually receive an R&R, you may spend many hours revising it and then waiting for a second (or third) set of reviews from the journal. For example, you submit your paper to *APSR* on Day 1 and are rejected on Day 120. You incorporate the reviewers' comments and submit to the *AJPS* on Day 180 and are rejected on Day 300, with more useful comments. You submit the paper to *Political Behavior* on Day 360, receive an R&R on Day 450, which is resubmitted on Day 510 and accepted on Day 600. That is a third of a tenure clock for a paper that hit at its first second-tier journal and without any exceedingly long delays from the top journals.
12. Most university book presses overlook some "double-dipping," but this should be discussed with potential editors.

https://doi.org/10.1017/S1049096516000160 Published online by Cambridge University Press

13. When I devised this system in 2004, I had 68 points remaining. When I submitted my tenure file in the fall of 2007, I had 8 points left (i.e., one 5 and three 1s). When I received tenure, I erased my board and started a new one with 110 points for the promotion to full professor.
14. This suggestion and most others in this article reflect my own fields of interest and therefore are based on data-driven papers. Those doing theoretical work can determine their own criteria for monitoring progress and then adapt this system.
15. A good tip given to me from Erin Cassesse at West Virginia University is to never put down a paper that you are working on without knowing how you will pick it up again the following day. The 15 minutes it saves at the beginning of the next day may be enough to write that day's page.
16. Gary King explained to me that his goal for turning around an R&R is 24 hours. His analogy is that you should be like a tennis player, with multiple balls being fired at you from across the court. Your goal is to meet each ball quickly and hit it back over the net. Once it is on the other side, it is someone else's problem for a while.

REFERENCES

Covey, Stephen R. 1989. *The 7 Habits of Highly Effective People: Powerful Lessons in Personal Change*. New York: Fireside/Simon and Schuster.

Covey, Stephen R., A. Roger Merrill, and Rebecca R. Merrill. 1995. *First Things First*. New York: Simon and Schuster.

Fisher, Bonnie S., Craig T. Cobane, Thomas M. Vander Ven, and Francis T. Cullen. 1998. "How Many Authors Does It Take to Publish an Article? Trends and Patterns in Political Science." *PS: Political Science & Politics* 31 (4): 847–56.

King, Gary. 2006. "Publication, Publication." *PS: Political Science & Politics* 39 (1): 119–25.

Trafford, Vernon, and Shosh Leshem. 2008. *Stepping Stones to Achieving Your Doctorate: By Focusing on Your Viva from the Start*. Maidenhead, UK: Open University Press.

Zigerell, L. J. 2011. "Of Publishable Quality: Ideas for Political Science Seminar Papers." *PS: Political Science & Politics* 44 (3): 629–33.

https://doi.org/10.1017/S1049096516000160 Published online by Cambridge University Press