

Work in Progress: The Faculty Development Canvas

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He has been recognized with several awards including two National Biomedical Engineering Teaching Awards, The national KEEN outstanding faculty award, and has been nominated twice for the CASE US Professor of the Year. Joe is the author of four books and his work, conducted exclusively with undergraduates, has been feature on the Discovery Channel, TEDx and CNN Health. He has received funded from NASA, NIH, NSF, Kern Family Foundation, VentureWell Foundation, Degenstein Foundation, and the US Department of Defense. He has delivered intensive teaching workshops throughout in the United States and internationally, including Finland, Chile, Argentina, Uruguay, and the United Kingdom. Joe earned his BS from Trinity College, his PhD from Duke, is a visiting faculty member at the Universidad Catolica de Chile in Santiago and was a visiting scholar at the Scientific Computing and Imaging Institute (University of Utah) and Stanford Technology Ventures Program.

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WIP: The Faculty Development Canvas

Introduction

This work-in-progress introduces a tool called the Faculty Development Canvas (FDC), a one page graphical framework for helping faculty think holistically about their own growth and development. We begin with a description and rationale for the layout followed by exercises that can be incorporated into existing faculty development programs. The paper concludes with preliminary results from a faculty survey.

The Faculty Development Canvas

The FDC, shown in Figure 1, was created using a combination of content and design principles from three frameworks. The first is the Wheel of Life (Byrne, 2005) a traditional pie-chart that suggests multiple dimensions of a fulfilling life. Borrowing from this wheel, each “slice” of the FDC represents ways a faculty member might express themselves (and grow) both professionally and personally. A blank category is included to allow for additional areas for professional and personal growth. As each individual will express the importance of each box in different ways, a faculty member (and some universities) have modified the areas to more accurately represent time and effort.

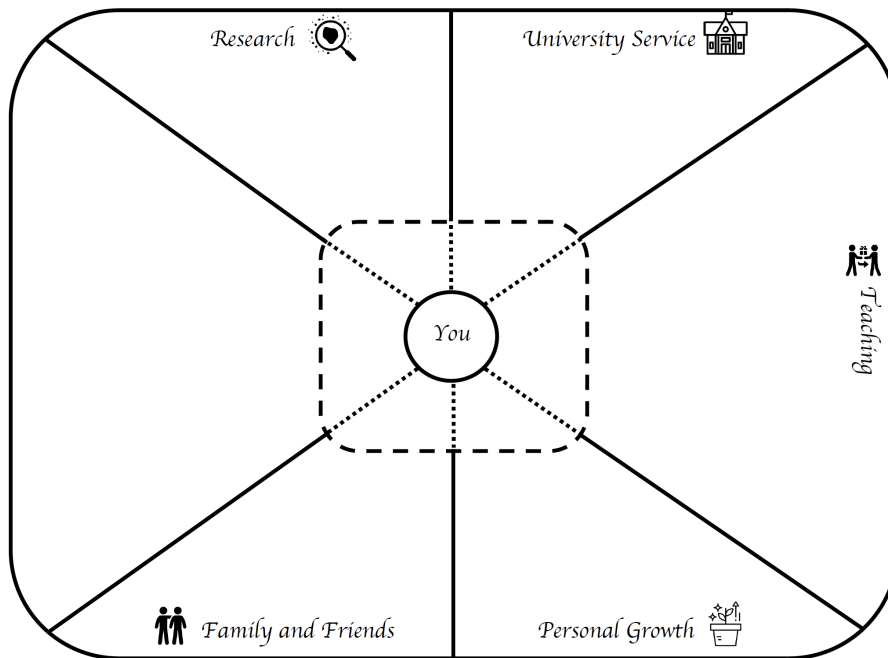


Figure 1: The Faculty Development Canvas.

The second framework is inspired by the Business Model Canvas (BMC) (Osterwalder et al., 2010). Rather than creating market value, as in the BMC, the intention is to help a faculty member intentionally navigate a career of fulfilment and purpose. Just as the BMC implies that there is no one way to start a successful business, there is no one way to be a successful faculty member. Several design principles from

the BMC were used. First, a canvas is a single page, with large blank spaces that invite exploration and flexibility. Simple frameworks reduce cognitive load and can be more easily internalized, such that they can become a persistent mental image to help make future decisions. Second, a graphical representation affords a more holistic and non-linear view of interactions between the elements. For example, a scholarly interest may find its way into the classroom, family or community or a teaching technique may be used in a research presentation or with student researchers. Third, a canvas is meant to be used iteratively and encourages ‘conceptual prototyping’ of a faculty identity. For example, the canvas can be a ‘safe space’ to explore and organize, before crafting a more detailed written document such as a self-statement.

The third framework is self-determination theory (Deci and Ryan 2012), and more specifically the complex interactions between intrinsic and extrinsic motivations. In the FDC, intrinsic motivation is within the dashed boundary (closer to the self), whereas extrinsic motivation is outside the boundary. For example, consider a faculty member who does not particularly enjoy making final edits to journal articles or serving on grant review panels. They will still engage in these activities because they know that they are necessary, and this allows them to continue working on the aspects of their scholarship that they do enjoy. However, faculty who, early in their career, are driven solely by extrinsic rewards (e.g., tenure), all too often continue to look solely to the university for longer-term rewards. On the other hand, intrinsic motivation has been shown to be a more reliable way to sustain focus, drive, grit, and creativity - all critical in maintaining productivity and fulfillment over the duration of a career. A primary purpose of the FDC is therefore to challenge faculty to consider how they balance what is intrinsically interesting versus what is extrinsically rewarded or required.

Development Over Time

The boundaries and entries into the FDC can change over at least three timescales: days, months and years. As such, faculty may fill out the canvas with any of these three timescales in mind, with the goal of becoming more intentional about how, when, and how often they engage in particular tasks. On a daily basis, this could be discovering how one works best - some faculty work best through intensely focused sprints in one area (serial task completion), whereas others may work best by switching between tasks (parallel task completion). Although the nature of a faculty position does not always allow one to choose between serial or parallel task completion, there is often a great deal of autonomy if one can become more intentional about how one works. On the timescale of months, the FDC can help plan out the balance between intrinsic and extrinsic activities. Spending too much time only completing either intrinsic or extrinsic tasks can be a warning sign. As faculty developers, we can suggest using the canvas with organizational tools (e.g., Slack, Trello, or other project management software), that can track and sequence actions. On the timescale of years and decades, a faculty member will likely change their behavior patterns and even their definition of success, and so the FDC can be used to create a longer term vision and strategy. As such, faculty developers can pair the canvas with other strategic planning frameworks such as Strategic Doing, SMART goals or the frameworks found in the books *Game Storming* (Gray et al., 2010) and *Thinkertoys* (Michalko, 2010).

The FDC as a Growing Edge

The FDC can also help graphically represent to faculty two patterns of growth that occur simultaneously. First, as one progresses in a faculty career, more choices become available, represented by the outward

movement of the edge of the canvas. This growth of the canvas is usually preceded by an investment in particular areas and therefore does not expand evenly across all categories. Investment in particular areas therefore not only leads to growth (and ideally more autonomy) in those areas, but also more opportunities. Second, the dotted intrinsic/extrinsic line also moves outward. A healthy career trajectory would be one of discovering what one enjoys for intrinsic reasons and then having the flexibility to do more of these activities. Graphically the intrinsic/extrinsic boundary is always “chasing” the outer boundary, which is itself expanding.

Uses of the Faculty Development Canvas

Several exercises can follow directly from the FDC. The example activities listed below only require 5-15 minutes to complete and can therefore be used together to form a coherent workshop or could be embedded throughout other programs as warm-ups or conclusions. Most are intended to be conducted as individuals, however, we have found these prompts to spark group questions and discussion.

1. If you could add or subtract a category from the canvas what would it be? Could you imagine replacing an existing category with something else?
2. List activities you are doing or (are planning) that will fit into each extrinsic section. Do the same for intrinsic activities. Which do you expect to be hard? Which do you expect to be easy? Why?
3. In each box, who would you turn to for advice? Could you form a sort of professional “advisory board” composed of thinking partners? How often do you check in with your board?
4. If you had 100 tokens to distribute (both intrinsic and extrinsic) across the areas of the canvas, where would you place them? For a typical week? Over the last year? This summer?
5. If you could reallocate your tokens (without sacrificing quality-of- life or possibility of university advancement) what might that look like. List concrete steps to move in this direction.
6. Which areas do you feel are expanding outward (e.g., new opportunities arising)? Are there any that are contracting? Where is the dotted (intrinsic) line moving outward (or inward)?
7. Find the strategic mission (or tactics) of your university. Try mapping your intrinsic and extrinsic activities and projects to the missions and tactics. It is important to recognize that no one person will contribute in a meaningful way to all aspects of the canvas.
8. Discuss any of the above with a peer, thinking partner, or with a small group to hear their thoughts on your own canvas as well as to see the diversity of ways in which to fill out the canvas.

The Henderson model of university change (Henderson et al., 2011) identifies four approaches to university change that ideally would be used in synergy. Three are primarily top-down (e.g., policies, programs). The single bottom up approach is to create a culture of ‘reflective practitioners.’ (Schon, 1984). It is difficult, if not impossible, for an administrator to map out how every single faculty member can play a role in the university’s mission or direction. Rather, it is up to the faculty member to discover how their talents and time can intersect the wider mission. In Henderson’s model, faculty who have developed healthy reflective habits will be vibrant and curious faculty who are more productive (Byrne, 2005). Exercises 6 and 7 are examples of connecting faculty goals to the wider university mission.

Faculty Feedback

The FDC was originally designed for use in faculty development programs, primarily with new faculty. It has been refined over the past three years with three cohorts of new faculty and two cohorts of 2-4th year faculty. However, it has also been trialed with senior faculty at our institution, as well as in both conference workshops in the United States and internationally. To gain feedback on the value of the canvas, we constructed a 12-question survey that was sent to the 2020 cohort of new faculty. This cohort was smaller than usual due to Covid hiring reductions (27 total), and only 10 faculty completed the survey. The survey is composed of baseline questions about previous planning practices, the specific use of the canvas in our development programs, and one open-ended question. The survey was open from 12/1/20-1/25/21, and it was noted in the invite that anonymized responses would be shared in a paper on professional development. The survey and feedback can be found at:

https://docs.google.com/document/d/1P_qkTGfyklAjnhph5ZVWvG3bhxu3NwQPZdxDUpr38eM/view

Conclusion and Future Directions

The FDC is a tool to help faculty develop reflective habits about how they intentionally set short-term goals that align with their holistic and long-term development, and in essence, turn their natural curiosity inward. Our aim in sharing the Faculty Development Canvas is to provide a tool we hope other faculty developers might find useful for working with their own faculty. The canvas is simple (so as not to overwhelm) but flexible enough to help faculty holistically consider all areas of their development, regardless of career phase. The added benefit for faculty developers is that it can serve as a common framework for individual consultations and group discussions, and help draw out faculty perceptions and pain points. Future work will focus on the limitations of this work-in-progress and expand beyond this small sample size from a single institution.

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