Twelve tips for creating an academic teaching portfolio

Kim Little-Wienert & Mark Mazziotti

Published online: 17 Aug 2017.

Submit your article to this journal

Article views: 1810

View related articles

View Crossmark data

MEDICAL TEACHER

Taylor & Francis
Taylor & Francis Group

Check for updates

TWELVE TIPS

Twelve tips for creating an academic teaching portfolio

Kim Little-Wienert[a] and Mark Mazziotti[b]

[a]Department of Pediatrics, Section of Pediatric Emergency Medicine at Texas Children's Hospital/Baylor College of Medicine in Houston, TX, USA; [b]Department of Surgery and Pediatrics, Texas Children's Hospital/Baylor College of Medicine in Houston, TX, USA

ABSTRACT

An academic teaching portfolio is not only a requirement at many academic teaching institutions, but it is also important in a medical educator's growth and development through documentation, reflection, evaluation, and change. Creating an academic portfolio may appear daunting at first but with careful advanced preparation, organized evidence collection of your educational work, proof of scholarship, and thorough documentation of self-reflection and change, you can produce a successful product that accurately represents your educational beliefs, accomplishments, and growth throughout your career. This article provides medical educators with twelve steps for creating a successful academic teaching portfolio.

Introduction

Medical school faculty share responsibilities in clinical care, research, as well as the education of many learners (medical students, residents, physician assistants, and fellows). Measuring teaching effectiveness is important with regard to making decisions about our future in academe (Berk 2005). According to Berk, these decisions may be formative, "which uses evidence to improve and shape the quality of our teaching," or summative, "which uses evidence to 'sum-up' our overall performance or status to decide about our annual merit pay, promotion, and tenure" (p. 48). Many sources of evidence are needed to assess teaching effectiveness. The teaching portfolio allows for these multiple sources of input to be included in performance evaluations (Chandran et al. 2009).

Many academic institutions require teaching portfolios and teaching awards as a requirement to be considered for promotion (Simpson et al. 2004), but it is important to remember that the teaching portfolio may also be used to stimulate teachers' professional development through self-directed learning and reflection of their teaching practices (Tigelaar et al. 2006). Our purpose in this article is to provide you with the knowledge and skills necessary to help you prepare a successful teaching portfolio that can be used to document your educational achievements and support the promotion that you deserve.

Tip 1

Prepare in advance

Creating a portfolio of your accomplishments is not something that can be done overnight. You need reflection as well as focus with regard to the goal at hand. Many teaching portfolios that are necessary for promotion have a specific set of requirements that need to be satisfied. For instance, your curriculum vitae (CVs) may need to be submitted in a specific format. In addition, you may not be able to apply for a teaching award until you are a faculty member for a required number of years. You should review your institution's or division's instructions and criteria for promotion so that the organization and requirements for submission are known as you compile your portfolio.

Early in your planning, look for examples of successful portfolios submitted by others before you start your own. These examples will provide you with a good reference point and a goal-setting standard. Do not be discouraged that the examples you are reading seem better than your own. Yours may have other strengths not apparent to you at the time, and remember, since you are starting this process early, your resume of accomplishments and experiences will strengthen as you gain expertise in the medical educational field.

Tip 2

Review your current curriculum vitae (CVs)

A CV is a required component in most teaching portfolios. CVs list your publications, invited talks, work experience, curriculum involvement, and previous education. First, update your CV in preparation for your teaching portfolio. Organize or highlight your CV with your educational achievements in mind, by placing each component of your CV into one of five education activity categories – teaching, curriculum, advising and/or mentoring, educational leadership or administration, and learner assessment (Simpson et al. 2004). This may help you to better define and convey your educational contributions and educational experience.

Tip 3

Establish your "shoebox"

The shoebox is your "bin" to collect information. Think of all of your educational activities as individual elements that will be included in some way in your portfolio. Over time,

you may forget about these activities as your schedule becomes busier. Lectures, group sessions, peer reviews, curricula developed, mentees, and educational leadership activities – items such as these should be kept in your shoebox. Keep track of where you are teaching, types of learners you impact, numbers of learners, and how much time you devote to each activity (Simpson et al. 2007). Update your CV on a regular basis with these activities so you do not forget about them. Organize and maintain your portfolio using a paper-based filing system (tabbed three-ring binder or file cabinet), web-based filing system (good for collecting emails), a folder on your hard drive (Kuhn 2004), or even a reference management filing software (e.g. Papers) (Bhargava et al. 2014) of your choosing.

Tip 4

Collect evidence of the quality of your teaching

Evidence of both *quantity* and *quality* should be collected in your "shoebox" (Tip 3) of information (Simpson et al. 2007). Some sources of evidence used to demonstrate the quality of your teaching require advanced planning and are best created at or near the time of the educational activity. Proper planning and reflection will allow for formative decisions to be made on the effectiveness of your teaching over time (Berk 2005).

Examples of sources of teaching effectiveness could include (a) self-evaluations, (b) course evaluations by learners, (c) peer evaluations, (d) supervisor evaluations, (e) teaching awards, (f) learner assessments or similar evidence of learning, (g) enrollment statistics, and (h) invitations to teach (Berk 2005; Simpson et al. 2007). Keep track of these sources as you collect them. Learner evaluations have been reported as the primary evidence used to show quality of educational efforts (Simpson et al. 2004; Berk 2005). Consider adapting previously validated evaluation tools (Sutkin et al. 2008) or creating your own tools that will help you assess the quality of your teaching immediately after the activity. You can also develop assessment tools for your learners to demonstrate evidence of their learning. Make sure the type of assessment you choose matches closely to your learning outcomes (Harden and Laidlaw 2012). Consider how to include higher levels of assessment (Kirkpatrick and Kirkpatrick 2006) by asking, "How can I assess changes to learners' behaviors or impact on programs and processes" (Lovato and Wall 2013)?

Tip 5

Participate in peer review of your teaching

Peer reviews provide observations and feedback that can be used to make formative decisions on how to improve the effectiveness and quality of your teaching (Sullivan et al. 2012). Peer review enables individualized learning, develops collegiality, promotes collaboration, and has been shown to positively change teaching behavior (Thomas et al. 2014).

Your reviewers can include peers, mentors, coaches, and supervisors as long as your peer review relationship is voluntary, mutually beneficial, and non-evaluative (Siddiqui et al. 2007; Schwellnus and Carnahan 2014). Remember to schedule enough time to participate in the actual

observation, clarify expectations prior to the scheduled observation, and receive feedback at the end of the observation (Siddiqui et al. 2007; Sullivan et al. 2012). After your peer review, spend time to reflect on the feedback you received and incorporate what you learned into your daily educational practices (Siddiqui et al. 2007). Document your peer review process for your teaching portfolio. Peer review participation and feedback allows for less exclusive reliance on student evaluations when you are evaluated for promotion.

Tip 6

Provide mentorship

Helping to develop another person's career can take time and energy but a well-matched mentorship can help to advance the careers of both the mentee and mentor (Coates 2012). Individuals who have served as mentors in healthcare have reported more personal satisfaction (Coates 2012), greater salaries, greater promotion rates, and stronger subjective career success compared to individuals who have not provided mentorship (Allen et al. 2006).

Advantages to the mentee include improved personal development, increased career advancement and satisfaction, increased academic productivity (including increased success rates in obtaining grant funding and publications), and superior educational skills (Flexman and Gelb 2011). One of the ways to show your success as a mentor is to demonstrate that your pupils have gone on to lead successful careers. Document who you have taught over the years and show what they have accomplished and what academic appointments they have obtained. Although all your learners are important, your mentees and their accomplishments give more credence to your educational skills. Written notes and emails from students and mentees that address or praise your educational efforts and activities should all be collected and saved in your "shoebox" (Tip 3). This unsolicited feedback is additional evidence of teaching effectiveness and recognition.

Tip 7

Solicit letters of support

Start thinking about mentors, peers, and supervisors that know your scope of work and can attest to your educational contributions and ask them to send you a letter of support that includes specific positive feedback. In addition, constructive feedback can provide further evidence of the letter writer's investment in your development as an educator. Send a copy of your CV and your personal statement to each person you ask for a letter. This will allow them to comment on your specific educational strengths and accomplishments. Choose letter writers who have reason to be familiar with the quality of your work and who have expertise in the areas they are commenting on (Roberts and Termuehlen 2013; Andre et al. 2017).

Tip 8

Demonstrate evidence of scholarship

In 2010, the Association of Medical Colleges (AAMC) Task Force on Educator Evaluation conducted a national survey

of medical schools to determine what educational contributions are most valued by these institutions and found that "ideally, the most important evidence for determining the quality of an educator's work should be peer-reviewed scholarship, national recognition, adoption of the educator's work elsewhere, and educational grants" (Gusic et al. 2014, p. 1007). The Association of Medical Education in Europe (AMEE) has formed a research committee to promote scholarship in medical education by developing various activities such as conferences, workshops, written guides, and electronic learning resources that promote research (Durning et al. 2012). Most tenure and promotion committees expect to see evidence of your scholarship.

Start by reviewing the educational literature to identify gaps in knowledge and develop projects that build on others' work (Beckman and Cook 2007). Approach each of your projects in a scholarly way by documenting the systematic methods to your projects' design, implementation, assessment, and redesign while incorporating previously published knowledge and "best practices" from the field (Simpson et al. 2007; Gusic et al. 2014). Finally, select measurable outcomes for your projects that are meaningful and feasible (Beckman and Cook 2007).

Approaching your projects in this systematic way will help you produce scholarship that can be peer-reviewed and disseminated to others to advance the field of medical education (Beckman and Cook 2007). Keep track of the breadth, scope (e.g. local, regional, national, or international), and impact of your scholarly projects (Simpson et al. 2007). Remember, educational scholarship not only includes publications but also invited presentations and educational products such as modules, curricula, or evaluation tools produced by you when those tools have been disseminated and adopted by others.

Tip 9

Think about your educational goals and objectives

Goals and objectives are often used interchangeably but are very different concepts when used appropriately. A goal is an overarching principle that guides decision-making and provides a framework for all your teaching activities. Goals should be general and broad in scope. Objectives or sub-goals are specific, measurable steps that can also be attainable, relevant, time-sensitive, engaging, and rewarding (SMARTER) (MacLeod 2012).

Educational goals should be set appropriately high but should also be focused and realistic (Chandran et al. 2009). An example of an educational goal would be, "I want to generate enthusiasm for learning according to individual learners' needs." A revision of Bloom's taxonomy of cognitive objectives describes levels of cognitive learning, including remembering, understanding, applying, analyzing, evaluating, and creating (Sweet et al. 2016). Consider these levels when formulating your educational goals and objectives.

Tip 10

Write down your educational philosophy

Your educational goals will become part of your educational philosophy. Your educational philosophy should guide and inspire you throughout your teaching career. It should demonstrate self-reflection and self-evaluation of your teaching and learning style (Chandran et al. 2009). It could include what you think your role is as a teacher and how you think students learn best. Are you a fan of the Socratic method? Do you favor small group teaching? Have you experimented with online learning? These are the kinds of questions you can answer in your educational philosophy. When thinking about your educational philosophy, consider how your teaching approach has been refined by changes you have incorporated because of the feedback you have received. Your philosophy should also be rooted in educational principles and theory, and it should be evident and applied throughout your educational portfolio (Chandran et al. 2009).

Your educational philosophy may be presented to the portfolio review committee at your institution in the form of a personal statement. A personal statement is your introduction to the portfolio reviewers. The key elements of your personal statement are your educational goals and philosophy (Tips 8 and 9), characteristics of your educational activities, the process of evaluation of those educational activities, and how you plan to perfect your teaching methods. This document should be concise (one to two pages) and should be revised periodically as your philosophy evolves over time (Johnson and Smith 2007). On a regular basis (such as at the end of each academic year), consider reviewing the items in your "shoebox" (Tip 3), reflecting on how your philosophy has evolved and documenting those changes in your personal statement (Kuhn 2004).

Tip 11

Document your professional development

Some physicians have had little to no education on how to teach during their training (Rodrigues et al. 2010). The General Medical Council (GMC) in the publication *Guidelines for Good Medical Practice* has stated that if you are formally involved in teaching, you must develop the skills to teach (GMC 2013–2017). Faculty development designed to improve your teaching effectiveness can provide you with new knowledge and skills on teaching and learning. It may even reinforce or alter your beliefs and attitudes toward teaching (Steinert et al. 2016). Faculty development positively impacts teaching, provides greater awareness of personal strengths and limitations, increases motivation for and confidence in teaching, and increases knowledge of educational principles and skills in teaching (Steinert 2010; Steinert et al. 2016).

When you participate in professional development, take time to reflect on your teaching and related experiences to consider how to apply the new teaching strategies, ideas, and approaches that you learn through the professional development activity (Steinert 2010). Common faculty development formats include educational workshops, short courses or certifications, fellowships, and other post-graduate advanced degrees. Identify your needs, find the faculty development format that works for you, and add to the "shoebox" (Tip 3) the evidence of faculty development you have done to enhance your teaching skills.

Tip 12

Have your portfolio reviewed by an expert prior to submission

Your college or university may have a faculty development department or peer review committee. If available, have an expert from this department review your portfolio weeks prior to submitting it so that you have time to make changes and incorporate feedback. It is also important to seek out others who have submitted successful portfolios and have them review your portfolio (Kuhn 2004). They may be able to provide valuable guidance on how to create a successful portfolio based on their own experiences. Your reviewers should not only proofread your portfolio but should also comment on how well your portfolio represents you as an educator. They can help you to highlight the educational activities and evaluations from your "shoebox" that best demonstrate your effectiveness as a teacher (Kuhn 2004).

Conclusion

An academic teaching portfolio allows for multiple sources of input to document educational expertise, while also supporting promotion based on important educational endeavors. The twelve tips we have outlined here provide the framework to best document and present an individual's educational philosophy, goals, and accomplishments. The academic teaching portfolio is an ideal presentation of your accomplishments to support promotion, and it also allows for professional development through self-directed learning and reflection. It is, thus, a vital tool for the medical educator.

Acknowledgements

Disclosure statement

Notes on contributors

Kim Little-Wienert, MD, is an Assistant Professor in Pediatric Emergency Medicine and Assistant Program Director of the Pediatric Emergency Medicine Fellowship Program at Texas Children's Hospital/Baylor College of Medicine. She is currently pursuing her Master's in Education at the University of Houston in Houston, Texas, and her educational interests include online learning and the use of innovation and technology in medical education.

Mark Mazziotti, MD, is an Associate Professor in Surgery and Pediatrics and Program Director of the Pediatric Surgery Fellowship Program at Texas Children's Hospital/Baylor College of Medicine. He is currently pursuing his Master's in Education at the University of Houston in Houston, Texas.

References

Allen TD, Lentz E, Day R. 2006. Career success outcomes associated with mentoring others: a comparison of mentors and nonmentors. J Career Dev. 32:272–285.

Andre K, Heartfield M, Cusack L. 2017. Evidence: what do I have and what do I need. In: Portfolios for health professionals. Chapter 4. 3rd ed. Chatswood: Elsevier Australia; p. 59.

Beckman TJ, Cook DA. 2007. Developing scholarly projects in education: a primer for medical teachers. Med Teach. 29:210–218.

Berk RA. 2005. Survey of 12 strategies to measure teaching effectiveness. Int J Teach Learn Higher Educ. 17:48–62.

Bhargava P, Patel BV, Iyer RS, Moshiri M, Robinson TJ, Lall C, Heller M. 2014. Academic portfolio in the digital era: organizing and maintaining a portfolio using reference managers. J Digit Imaging. 28:10–17.

Chandran L, Gusic M, Baldwin C, Turner T, Zenni E, Lane L, Balmer D, Baron M, Rauch D, Indyk D, et al. 2009. Evaluating the performance of medical educators: a novel analysis tool to demonstrate the quality and impact of educational activities. Acad Med. 84: 58–66.

Coates W. 2012. Being a mentor: what's in it for me? Acad Emerg Med. 19:92–97.

Durning SJ, Dolmans D, Cleland J, Mennin S, Zubair A, Gibbs T. 2012. The AMEE research committee: initiatives to stimulate research and practice. Med Teach. 34:458–461.

Flexman A, Gelb A. 2011. Mentorship in anesthesia. Curr Opin Anaesthesiol. 24:676–681.

Graduate Medical Council. 2017. General Medical Council: Working with doctors working for patients. 2013–2017. Manchester: General Medical Council; [accessed 2017 Jul 19]. http://www.gmc-uk.org/guidance/good_medical_practice/teaching_training.asp

Gusic ME, Baldwin CD, Chandran L, Rose S, Simpson D, Strobel HW, Timm C, Fincher RM. 2014. Evaluating educators using a novel toolbox: applying rigorous criteria flexibly across institutions. Acad Med. 89:1006–1011.

Harden RN, Laidlaw JM. 2012. Ten questions to ask when planning a curriculum. In: Essential skills for a medical teacher: an introduction to teaching and learning in medical education. Chapter 11. Edinburgh: Churchill Livingstone; p. 65–71.

Johnson PN, Smith KM. 2007. The teaching portfolio: a useful guide for pharmacists' teaching goals. Am J Health-Syst Pharm. 64: 352–356.

Kirkpatrick DL, Kirkpatrick JL. 2006. Evaluating training programs. 3rd ed. San Francisco (CA): Berrett-Koehler Publishers, Inc.

Kuhn G. 2004. Faculty development: the educator's portfolio: it's preparation, uses, and value in academic medicine. Acad Emerg Med. 11:307–311.

Lovato C, Wall D. 2013. Chapter 27, Program evaluation: improving practice, influencing policy, and decision-making. In: Swanwick T, editor. Understanding medical education: evidence, theory and practice. 2nd ed. Oxford (UK): John Wiley & Sons, Ltd.; p. 385–399.

MacLeod S. 2012. Making SMART goals SMARTER. Physician Exec. 38:68–72.

Roberts LW, Termuehlen G. 2013. (Honest) letters or recommendation. Acad Psychiatry. 37:55–59.

Rodrigues J, Rodrigues J, Sengupta A, Ramoutar D, Maxwell S. 2010. Are UK junior doctors being taught to teach? Med Educ. 44: 324–324.

Schwellnus H, Carnahan H. 2014. Peer-coaching with health care professionals: what is the current status of the literature and what are the key components necessary in peer-coaching? A scoping review. Med Teach. 36:38–46.

Siddiqui ZS, Jonas-Dwyer D, Carr SE. 2007. Twelve tips for peer observation of teaching. Med Teach. 29:297–300.

Simpson D, Fincher RM, Hafler JP, Irby DM, Richards BF, Rosenfeld GC, Viggiano TR. 2007. Advancing educators and education by defining the components and evidence associated with educational scholarship. Med Educ. 41:1002–1009.

Simpson D, Hafler J, Brown D, Wilkerson L. 2004. Documentation systems for educators seeking academic promotion in U.S. medical schools. Acad Med. 79:783–790.

Steinert Y. 2010. Making it all happen: faculty development for busy teachers. In: Cantillon P, Wood D, editors. ABC of learning and teaching in medicine. Chapter 16, 2nd ed. London (UK): BMJ Books; p. 73–77.

Steinert Y, Mann K, Anderson B, Barnett B, Centeno A, Naismith L, Prideaux D, Spencer J, Tullo E, Viggiano T, et al. 2016. A systematic review of faculty development initiatives designed to enhance

teaching effectiveness: a 10-year update: BEME guide no. 40. Med Teach. 38:769–786.

Sullivan PB, Buckle A, Nicky G, Atkinson SH. 2012. Peer observation of teaching as a faculty development tool. BMC Med Educ. 12:26. doi: 10.1186/1472-6920-12-26

Sutkin G, Wagner E, Harris I, Schiffer R. 2008. What makes a good clinical teacher in medicine? A review of the literature. Acad Med. 83:452–466.

Sweet C, Blythe H, Carpenter R. 2016. Why the revised bloom's taxonomy is essential to creative teaching. National Teach Learn Forum. 26:7–9.

Thomas S, Chie QT, Abraham M. 2014. A qualitative review of literature on peer review of teaching in higher education: an application of the SWOT framework. Rev Educ Res. 84:112–159.

Tigelaar DH, Dolmans DM, de Grave WS, Wolfhagen IP, van der Vleuten CPM. 2006. Participants' opinions on the usefulness of a teaching portfolio. Med Educ. 40:371–378.