

Education

Vice Chair for Education: Twelve Roles to Provide a Framework for Success

Tara M. Catanzano, MD, Priscilla Slanetz, MD, MPH, Pamela W. Schaefer, MD, Alison L. Chetlen, DO, David M. Naeger, MD, Tan-Lucien Mohammed, MD, Vikas Agarwal, MD, Mark E. Mullins, MD, PhD

Rationale and Objectives: An increase in the administrative work in our healthcare system has led to an increase in the number of administrative positions in radiology departments. Many of these are Vice Chair roles, including Vice Chair for Education (VCEd). The responsibility of this position has expanded, often far beyond the original definition. This article defines the role and expectations of the Vice Chair for Education and provides suggestions for success.

Materials and Methods: This article will review 12 vital roles that a Vice Chair for Education must play to be an effective advocate for radiology education within a department.

Results: Key attributes of an educational leader are delineated, divided into 12 areas or roles.

Conclusion: This article summarizes key leadership skills needed by Vice Chairs for Education in order for them to be effective in their role.

Key Words: Academic medicine; Leadership; Mentoring; Radiology.

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cademic medical centers have seen an increase in administrative roles to meet the increasingly complex healthcare environment. Many departments have expanded leadership positions, including increasingly prevalent Vice Chairs for Education (VCEd). The Alliance of Directors and Vice Chairs of Education in Radiology (ADVICER) special interest group of the Association of University Radiologists (AUR) created a VCEd job description in 2015 (1). However, even with the definition and scope of practice put forth by ADVICER and other groups, VCEds have seen continued expansion of their responsibilities (2). As a working group of ADVICER, we comprise a team with decades of leadership experience, including that as VCEd. It is our hope that by describing these (tips) that we may pass

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along some helpful advice to current or aspiring VCEd, organized into 12 roles.

ROLE 1: TEACHER

A VCEd should be, above all, an outstanding educator.

Role Modeling

One of the central tenants of education is role modeling, thus a VCEd must be able to demonstrate teaching excellence in order to establish authentic leadership (3-6) and inspire others (7).

Educational Versatility

Versatility is essential. Our learners are at many levels ranging from medical students to practicing physicians, physician extenders (Nurse Practitioners and Physician Assistants), technologists and referring providers, representing multiple fields and requiring a wide repertoire of teaching techniques. Educational leaders sometimes find themselves as the "teacher of last resort" when there is a last-minute cancelation, requiring skill and flexibility in teaching with little or no time for preparation.

Improving the Teaching Skills of Others

Guiding the development of others as educators (1) requires a deep familiarity with the process, and experience. Sharing

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From the Office of Faculty Affairs at the University of Massachusetts Medical School-Baystate in Springfield, Massachusetts (T.M.C.); Department of Radiology at the Boston University School of Medicine in Boston, Massachusetts (P.S.); Massachusetts General Hospital, Boston, Massachusetts (P.W.S.); Department of Radiology, Division of Breast Imaging at Penn State Health, Hershey Medical Center, Hershey, Pennsylvania (A.L.C.); University of Colorado School of Medicine in Denver, Colorado (D.M.N.); University of Florida – College of Medicine, Gainesville, Florida (T.-L.M.); Department of Radiology, University of Pittsburgh Medical Center, Pittsburgh, Pennsylvania (V.A.); Department of Radiology and Imaging Sciences, Emory University, Atlanta, Georgia (M.E.M.). Received October 18, 2019; revised February 8, 2020; accepted February 9, 2020. The authors have no relevant disclaimers for this manuscript. **Correspondence to:** T.M.C. e-mail: Tara.catanzano@bhs.org

teaching styles, pearls, and pitfalls can provide much needed support for developing educators. By providing feedback on areas of weakness and opportunities for growth, a VCEd can be a powerful leader of aspiring clinician educators.

Innovation

Educational leaders in the modern era often find themselves being innovators, promoting new techniques (8). Abundant research has shown the value of newer techniques including flipped classrooms, asynchronous learning, and the use of audience response systems (9). To create a culture receptive to these educational innovations, the VCEd should take the lead in employing these newer methods (8). Leveraging relationships with other educational leaders such as in dedicated Departments of Medical Education allow a VCEd to collaborate with individuals with similar interests and expertise, often leading to substantial innovation. These unique and innovative teaching methods may be shared with other educators at national meetings, allowing dissemination of these novel strategies. Sharing of these methods may also occur through peer reviewed publication, such as the 2016 Educationthemed issue of Academic Radiology (10) (July Volume 23, Issue 7, pp. 777–932) edited by Slanetz and Kelly.

ROLE 2: LEADER

A VCEd should be a leader in education and partner with institutional education leaders. The VCEd should encourage innovation, and embrace new educational methodologies and technology.

Leadership Competencies

A VCEd should pursue ongoing training in essential leadership areas including time management, teamwork, human resources management, leading change, decision making, organizational structure, business skills, quality improvement, project management, and communication. In addition to local leadership training programs, the American College of Radiology (ACR) Radiologic Leadership Institute provides an annual 3 day Leadership Summit, an annual 3 day American College of Radiology-RBMA (Radiology Business Management Association) Practice Leaders Forum and a webinar series that address many of these competencies. The AUR also sponsors a management program at its annual meeting. Specialty-neutral leadership development programs are offered by the AAMC and Harvard Macy.

Vision, Mission and Strategic Planning

The VCEd guides the education team in educational process improvement. We recommend convening a task force to establish clear vision and mission statements with three to five overarching program aims. This task force should include constituents of different levels, for example, academic faculty, residents of differing years, and a private practice/community physician (dependent on the departmental model). The task force should perform a SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis to establish the current state (11-13). This will allow the formulation of an overarching action plan with SMART (Specific, Measurable, Assignable, Realistic, and Time-based) goals and objectives organized by program aims (14). Through a continual PDSA (Plan, Do, Study, and Act) reassessment process (15-17) the VCEd should seek feedback from stakeholders following implementation of new initiatives, and continually revise and establish new goals (18,19). In order to develop successful and impactful programs and personnel, the VCEd should lead a needs assessment before devoting resources, including careful scrutiny of the mission statement and organizational goals. An initial needs assessments should also identify specific problem areas that can be prioritized (20). Conducting this analysis includes asking common questions (20,21) (see Table 1). The needs analysis should be linked to measurable outcomes which will add value to the organization, thus gaining management support (20).

Service

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The VCEd should strive to be a member of key hospital and institutional educational committees that are designed to share ideas and best practices and support educational initiatives (1).

| TABLE 1. Needs Assessment | |
|---------------------------------|--|
| Category of Needs Assessment | Questions to be Addressed |
| Problem? | What is the nature of the problem being addressed? |
| Resources? | What are the total resources available? On which services are resources cur- rently spent? |
| Pros/Cons? | What are the costs and potential bene- fits of putting resources into a spe- cific area? |
| Re-allocation of resources? | Can any existing services be provided as effectively, but with fewer resour- ces? If some growth areas still cannot be funded, are there any services which should receive fewer resources, or even stopped? |
| Needs analysis logistics? | What is the budget for analysis?How is this assessment perceived by the organization?Who is available to help conduct the needs analysis?What is the timeframe for completing the analysis? |
| Outcome? | What will be the measurable outcomes of a successful needs analysis report? |

All available institutional resources should be reviewed and cataloged. Examples include medical school academies, fellowships in medical education, institutionally sponsored grants for educational innovation and scholarship, and global health symposia addressing education in international settings.

ROLE 3: MENTORSHIP

Mentorship for self and others is an important role for the VCEd. Cultivating and developing mentorship relationships is pivotal to the development of faculty and trainees.

Mentorship

The importance of mentorship in academic medicine is wellestablished, particularly for career development and progression of academic rank (22,23). We suggest a mosaic mentorship model where multiple mentors meet different mentorship needs as well as a multidirectional process where there is a continuum between roles as a mentor and mentee.

Continuum

Vice Chairs remain in need of their own mentorship, as no one completely outgrows the benefits of being a mentee. Institutional peers and the Chair are typically excellent mentors (and coaches). Mentorship from these individuals may revolve around the topics of organizational stewardship, resource allocation, faculty development, leadership development, and scholarship (24). Guidance on navigating the local political environment and institutional processes is vital.

Peers

Mentors outside of the institution are also critical. These individuals provide perspective by reflective listening, without bias created by working at the institution. Their lack of familiarity with the daily environment of the mentee's institution allows them to act as a sounding board for discussion of new initiatives and sharing challenges. The peer mentorship model (25) also provides a robust environment for the sharing of ideas and successes, which may then be translated into practice in the mentee's home institution. The ability to develop collaborations in this peer mentoring group has tremendous potential to develop resources beneficial to academic medicine, often at the national level. This manuscript is an example of just such a collaboration amongst members of an education special interest group.

Relationship to Faculty Development

An important role of the VCEd is mentorship of other department faculty, including (1) academic advancement in rank, (2) skill development (e.g., teaching techniques or manuscript preparation), (3) curriculum development, and (4) faculty needs assessment for professional success. In large departments, VCEd face a significant challenge in their ability to provide personalized mentorship, thus driving a need for development of mentorship programs. One more recentlypromoted approach is small group mentorship. Creating mentorship programs, networking and advocacy of peer mentorship allows VCEd to extend their impact and more efficiently use resources.

National Opportunities

National societies (26,27) including the AUR, have mentorship programs, often occurring at annual meetings. These dyadic mentorship moments allow opportunity for academic community members from different institutions to benefit from each other. These interactions may then develop into longer term mentorship or sponsorship relationships.

ROLE 4: SPONSOR

The VCEd is in an excellent position to help advance the careers of others through sponsorship regionally and nationally.

Sponsorship Versus Mentorship

Sponsorship is well-recognized as a vital component of career development and academic success (28-30). A mentor will speak TO you (to assist in your career development) whereas a sponsor will speak ABOUT you (to tout your abilities and value to others who can present you with growth opportunities). This process works best when the VCEd is able and willing to advocate for others' careers even when it means fewer opportunities and accolades for themselves. The reach of a sponsor far outweighs that of a mentor as a mentor's bandwidth is limited by the amount of time available to them. Contrarily, sponsors can benefit a larger number of faculty by providing them with opportunities which do not represent a significant time commitment for the sponsor, or may save time for the sponsor.

Sponsorship at Home and Beyond

Sponsorship may occur locally, nationally or internationally. The VCEd can make appointments to committees, select speakers for conferences, or make nominations for professional development programs or leadership roles (31). Introduction of a faculty member to the VCEd's own academic network at an annual meeting is an excellent way to demonstrate support for an individual. Sponsoring an invitation by the VCEd to become a visiting professor at their institution is another method to advance the visibility and reputation of a faculty member from a different institution.

ROLE 5: CHEERLEADER

The VCEd needs to be more than just a change agent. They also need to have an upbeat, positive attitude and be as optimistic as possible.

Wellness & Burnout

In modern health care, increased administrative and clinical responsibilities can hinder faculty scholarly productivity and career satisfaction, and may contribute to increased attrition from academic medicine (32,30,33,34,35-37) Physicians chose careers in academic medicine with an expectation of opportunity in education and research. The erosion of time may yield frustrations, causing one to become cynical. A feeling of "purpose" and autonomy are essential to maintain engagement and emotional wellbeing. The VCEd is wellpositioned to assist others with maintaining or regaining their (professional) purpose. The VCEd may provide muchneeded support to remind department members of their important roles in academic medicine and patient care. Sometimes, this reminder is all that is needed to refocus on personal missions and career goals (38). Recognition, appreciation and gratitude also goes a long way.

Coaching

When support is not enough, the VCEd may need to offer focused coaching. The benefits of coaching are well-established in the business literature but have not been as rapidly embraced in healthcare. For example, coaching programs dedicated to wellness, such as those focused on smoking cessation, have been successful (39,40). By acting as an executive coach, with a specific task- or skill-oriented focus, the VCEd can be a powerful resource. It is important to note that coaching differs from mentorship; coaching involves a very specific area of need to be addressed and is task driven. Mentorship, by contrast, is goal focused (41,22,23).

Some successful approaches to this domain include taking care of oneself physically and mentally, role modeling, organizing social events, establishing awards and celebrations, giving public kudos, having regular check-ins with team members, and advocating for the education mission (especially with respect to the patient care mission and budgetary considerations).

ROLE 6: COLLABORATOR

A successful VCEd must be skilled in professional collaboration. We crave outstanding team members and expect ourselves to be exemplars.

Facilitator

The VCEd must find ways to facilitate collaboration among various stakeholders to streamline educational processes and to maximize the educational impact of the budget. For example, developing a wellness initiative that addresses many groups (e.g., medical students, residents, and fellows) collectively is often more cost-effective and valuable than having each group create their own individual approaches.

Teamwork, Protocol, and Process

The VCEd can be more successful by bringing motivated educators together to share ideas and brainstorm solutions to departmental challenges, thereby facilitating meaningful and positive change. One of the challenges is learning how to manage potential conflicts that can arise when there are differences in opinion. In these cases, the VCEd must demonstrate leadership by finding ways to harness the creativity, innovative ideas, and diversity of thought and then bring the group together (42). This skill can take time to develop, but building success with small tasks will lay the foundation for later success with larger initiatives. Working together also allows the VCEd to be knowledgeable about programmatic needs. Collaborating with educational leaders outside of the department, Vice Chairs can share best practices from other departments and the medical school, ultimately enhancing the overall quality of training and the learning environment.

Collaborator as Sponsor

Invited collaboration on projects or papers is another manner in which a Vice Chair can sponsor an individual. Collaborative authorship teams are becoming increasingly popular as clinical pressures continue to erode into academic time. These teams are mutually beneficial to the sponsor, who can take a senior author role, and the protégé, who can act as first or significantly contributing author.

ROLE 7: (FACULTY) DEVELOPER

The VCEd should champion a process whereby departmental faculty members with a focus in education can have successful and rewarding careers.

Faculty Development

Faculty development programming requires guiding principles that are attuned to core values and best practices (43). Recent literature emphasizes the importance and need for the intentional, explicit promotion of leadership development curricula and training in medical education (44,45). Principles of adult learning should be interwoven in all interactions while encouraging direct, practical application of relevant life experiences, and career-related goal-oriented faculty development activities (43). Teaching sessions should also focus on active learning and provide opportunities to practice new skills (43). Guidance by educational experts and the collective wisdom of the peer group of scholars should be used as much as possible in the learning process to promote peer feedback and support (43). Finally, this curriculum should be a dynamic, evolving learning program that is based on evaluation and feedback (43).

ROLE 8: NETWORKER

The VCEd is the lead educational representative in an academic department. One's effectiveness benefits from professional networking.

"Networking at Home"

Institutionally, the VCEd can network with other VCEd in other departments to find synergies. A group of VCEd working together can better identify solutions to common problems. Often, networking with chairs, or noneducation vice chairs outside the department also facilities change and advances the overall mission. Developing a network within the institution becomes important in executing on the other roles of a Vice Chair. For example, as a mentor and sponsor (46), it is essential to find opportunities for your faculty to teach, be trained in educational techniques, and present their scholarship. Networking facilitates the VCEd finding such activities and then enables a pathway for them to nominate faculty.

"Networking Away"

Vice Chairs benefit from networking with individuals in similar roles at other institutions and sharing solutions to common problems (47).

ROLE 9: MANAGER & RECRUITER

The VCEd should assume a leadership role in the recruitment, oversight and retention of students, residents, fellows, and faculty. By necessity, the VCEd should address recruitment and retention across multiple domains.

Diversity, Inclusion and Outreach Programs

Diverse healthcare teams have more collective ideas, are able to communicate better with diverse patient populations and provide better care (48,49). The VCEd should assure that training programs strive for diversity, including the development of initiatives that enhance traditional applicant pools. Potential approaches include (1) highlighting diversity on departmental websites, (2) providing unconscious bias and cultural competency training for interviewers, (3) developing outreach programs at a wide range of high schools, colleges, graduate schools and medical schools and sponsoring shadowing experiences for underrepresented groups, (4) sponsoring online seminars, specialty interest groups, research electives and clinical electives available for medical students and residents nationwide, and (5) working with other departmental leaders to recruit more diverse faculty, coordinators and technologists to serve as role models (50).

Marketing and Advertising

A VCEd should assure effective advertisement of training programs and educational initiatives (51). Emphasis should be placed on departmental websites as, for the majority of applicants, it provides the portal of entry to the educational opportunities at the institution. The VCEd should lead a collaborative effort to provide the educational mission and vision statements. The website should emphasize the many

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facets of medical student, resident and fellowship training programs as well as departmental CME and faculty clinical educator programs (52,53). Links to departmental and institutional resources that may be appealing to a broad range of potential applicants are also useful, such as (1) the institutional Graduate Medical Education website, (2) educational opportunities at affiliated medical schools, business schools, schools of public health and other graduate schools, (3) research opportunities including internal grants and travel stipends, (4) leadership development options, (5) global health projects, (6) support for innovation, and (7) a wide range of committees and interest groups. In addition to the website, having an active Twitter account will continually highlight the activities and accomplishments of trainees, faculty and the institution (54-57). Social media may also engage a broader range of future employees.

Trainee Selection Process

Prior to the interview season, it is optimal to review best practices with departmental program directors. Devise a uniform, unbiased method of reviewing applications and selecting candidates to interview. The process should assess the features deemed most important for success in each training program. Following interviews, the VCEd should participate in the ranking meetings for resident and fellow applicants.

Retention of Trainees

The Vice Chair should work with program directors to assure that trainees are receiving the best possible education and are as satisfied as possible. Assure that each training program has a (1) well-balanced curriculum, (2) an active program evaluation committee that adequately addresses deficiencies and makes improvements, (3) an active clinical competency committee that assures adequate training for each trainee, supported by formalized assessment of performance, and (4) faculty instruction in "cutting-edge" teaching techniques.

Recruitment and Retention of Faculty

The VCEd is responsible for assuring that educational programs have a core faculty dedicated to teaching and mentoring trainees. The VCEd should meet with all faculty applicants. This will allow for expectation setting of their teaching responsibilities and commitment to the training programs. For those interested in careers as educational leaders or scholars, the institutional educational opportunities available to faculty can be highlighted, and an offer of personal mentorship can be made.

ROLE 10: EMOTIONAL INTELLIGENCE

Given the need to work with a large number of stakeholders, presumably having a wide variety of agendas, VCEd must quickly and effectively assess scenarios and circumstances.

Emotional Intelligence

Emotional intelligence (EI) has five key components: (1) selfawareness, (2) self-regulation, (3) motivation, (4) empathy, and (5) social skills. Studies have demonstrated that EI corresponds positively with successful leadership in academic medicine (44,58). EI is vital to understanding behavior patterns and emotions of colleagues (59). Often, it is what is unsaid that is of greatest importance and has the most significant impact on performance. Social skills and self- awareness (of one's own emotional responses) are key in interactions with others. The ability to self-regulate emotions in *high stress* situations allows the VCEd to engage in meaningful conversations, particularly when the subject is challenging and fraught with potential conflict.

EI, while innate in some individuals, can be developed. Feedback (e.g., a 360° evaluation) can be helpful for a VCEd to determine their level of EI. A good plan often is to develop your strengths and neutralize your weaknesses. It can be quite challenging to turn a personal weakness into a strength. Individuals can find resources to improve themselves, such as workshops (locally or at national meetings), published articles and mentorship. The *Harvard Business Review* is an excellent resource for information on EI (60). Coaching may also provide an avenue by which a VCEd can develop better skills in this domain (61).

ROLE 11: NEGOTIATOR

It is inevitable that poor VCEd negotiator skills will take their toll on education programs. All resources are limited, requiring the VCEd to leverage skill as a negotiator to preserve or obtain needed resources.

Academic

Negotiation skills are critical for professional success, yet most medical faculty are underprepared in this skill (62,63). For VCEd, negotiation should be thought of in the context of creating a successful learning and working environment. Developing a strong relationship with, and "managing up" to the chair is an essential component of the Vice Chair so as to ensure that needed resources are available. Dedicated attention to cultivating this relationship is vital for future negotiations and ongoing collaboration.

Adversarial

In positional bargaining, two parties adopt disparate positions and incrementally move toward compromise (64). However, instead of "winners" and "losers," it often is more effective to identify the must-haves and wants, determine the Best Alternative To a Negotiated Agreement, and finally set objectives rather than interests or taking positions.

Communication

Strong communication skills are perceived as an important trait for leaders, especially when negotiating. In the Barrett

model, leaders identify a spiral with core communication skills (strategy, writing, and speaking) at the center (65-67). As leaders move higher in an organization, they need to master more complex skills including EI, cultural literacy, and listening and eventually skills like change communication (68). As leaders navigate through the spiral, they are able to eradicate many of the common barriers to effective communication such as: physical barriers, digital communication/interaction, inability to listen to others, lack of transparency and trust, and cultural misperceptions (69).

ROLE 12: (STRATEGIC) PLANNER

Identifying strategic goals for the education mission is paramount to success.

Process & Planning

The role of VCEd requires continual and purposeful reflection, goal setting and revising strategic vision to remain relevant. Healthcare leadership is the ability to effectively and ethically influence others for the benefit of individual patients and populations (70). It is imperative that a Vice Chair consider current and future needs and wants of all relevant stakeholders. Engaging stakeholders requires critical thinking, EI, teamwork and integrity. This will require continued leadership training, incorporating both individual and institutional projects with immediate practical application of newlyacquired skills (71). This professional development should incorporate all the traditional health care domains of clinical practice, teaching and research (72,73). The VCEd must be able to engage the various interprofessional communities within the hospital, academic affiliate or health care system (73). Improving collective leadership and maintaining the right balance among stakeholders and across areas has the potential to create a high-functioning environment. In certain scenarios, the Vice Chair can exert the most change by utilizing collective or distributed leadership (74). Leveraging the skills required in the various roles of a VCEd plays an important part in the success of strategic endeavors. Roles such as an educator, sponsor, negotiator, and networking can be combined to effect large scale culture change, or to create an institutional, regional or national educational resource to benefit learners.

Structure

In the educational literature, school leaders (analogous to the Vice Chair role) have great influence on student outcomes when they focus their relationships, their work, and their learning on (1) establishing goals and expectations, (2) strate-gic resourcing, (3) planning, coordinating, and evaluating teaching and the curriculum, (4) promoting and participating in teacher learning and development, and (5) ensuring an orderly and supportive environment (75).

CONCLUSION

The Vice Chair for Education plays a pivotal role in the vitality of an academic department. There are many expectations and responsibilities for this individual, including educational oversight, faculty development, sponsorship & mentorship and negotiation for necessary resources. These twelve roles have been compiled and described to assist our community in understanding the scope of this position and to foster new ideas, experiences and growth.

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