

Twenty-Five Years of Education in Psychology and Psychology in Education

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This article is part of a special issue of the *American Psychologist* celebrating the American Psychological Association's (APA's) 125th anniversary. The article reviews the last quarter century (1991–2016) of accomplishments by psychology's education and training community and APA's Education Directorate. The purpose is to highlight key trends and developments over the past quarter century that illustrate ways the Directorate sought to advance *education in psychology and psychology in education*, as the Directorate's mission statement says. The focus of the Directorate has been on building a cooperative culture across psychology's broad education and training community. Specifically APA has (a) promoted quality education—from prekindergarten through lifelong learning, (b) encouraged accountability through guidelines and standards for education and training, and (c) supported the discovery and dissemination of new knowledge to enhance health, education, and well-being. After identifying challenges and progress, the article discusses the future of the field of psychology and the preparation of its workforce of tomorrow.

Keywords: APA Education Directorate, history of education in psychology, undergraduate education, graduate education, psychology in the schools

The American Psychological Association (APA) by laws state that APA's goal is "to advance psychology as a science and profession and as a means of promoting health, education, and human welfare . . . [This occurs by] . . . the increase and diffusion of psychological knowledge" (APA, 2016a). In fact, APA's educational mission underscores psychological science and practice to advance the public interest. This crosscutting nature of education is reflected in the range of activities undertaken by the APA's Education Directorate (Directorate) as described in this historical review.

The purpose of this article is to highlight key trends, over the past quarter century, that illustrate both advances in education within psychology and psychology's far-reaching impact on education. The article will focus on the development of a cooperative culture within the broad education and training community in psychology and the importance of competency-based quality education in areas of science, health care, and public service. APA and its Education Directorate have (a) promoted quality education—prekindergarten through lifelong learning, (b) encouraged accountability through guide-

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lines and standards for education and training for all psychologists, and (c) supported the discovery and dissemination of new knowledge to enhance health and education, and improve well-being.

The past 25 years (1991–2016) reflect a period of rapid change in education in the United States. These changes shaped the work of the Directorate and education in psychology in general. The shift to a knowledge-based economy in the United States has increased interest and enrollment at both the undergraduate and graduate levels, with psychology continuing to be one of the most popular areas of study (Norcross et al., 2016). The ethnic and cultural diversity of student populations has increased. Advances in technology have created opportunities such as virtual classrooms and the ability to obtain information instantaneously through the Internet. Probably the biggest change has been the increased calls for accountability and the measurement of the outcomes of education; metrics such as competencies have been adopted widely at all levels of education. This focus on outcomes is being driven by both consumers (students, parents, patients) and the federal government.

Rather than focus on individual names and dates, the article will emphasize formative and summative outcomes of the evolution of psychology education including policies, guidelines, curricular recommendations, conference proceedings, and publications that are the building blocks of the dynamic history of education in psychology. These elements will illustrate how the history of education sets the stage for the successful future of psychology.

The Education Directorate: A Vision and Organizational Structure Designed to Carry out APA's Mission

To operationalize the educational mission of the APA, and respond to society's expectations for quality education, the Education Directorate was established in 1990 with a stated goal of advancing the science and practice of psychology for the benefit of the public through educational institutions, programs and initiatives. Nelson and Stricker (1992) provide a comprehensive, early history of education in psychology leading to the events chronicled in this article. Nelson and Stricker describe how the ongoing focus on education directly led to establishment of the Directorate. The structure and function of the Directorate moved the mission forward over the past 25 years. As part of that evolving process, in 2001, with the input of a group of educational leaders in psychology, the Directorate reviewed and restated its mission as, *Education in Psychology and Psychology in Education*.

The Directorate seeks to advance policy and financial support for education and training in psychology and to meet the demands of changing demographics in a multicultural society through culturally sensitive education and training (APA, 2016b). Issues of cultural competency and diversity, in all its forms, are explicit components of all guidelines, policy, and projects undertaken by the Directorate (APA, 2005). Guideline 3 of the APA (2003) *Guidelines on Multicultural Education, Training, Research, Practice and Organizational Change for Psychologists* states: "As educators, psychologists are encouraged to employ the constructs of multiculturalism and diversity in psychological education." This is represented in all that the education community does.

To carry out its goals on a day-to-day basis, the Directorate developed nine program offices ranging from the Center for Workforce Studies to the Office of Continuing Education in Psychology.¹ To ensure continued member engagement in APA's educational activities, in 1991 the Board of Educational Affairs (BEA) was established, with a broader membership than that of the prior Education and Training Board. Because BEA's responsibilities cut across all aspects of education in psychology, there are seats designated for members representing science, practice, and public interest, besides elected members at large.

BEA makes and reviews policy recommendations and work products of their own as well as from these groups.

¹ The other program offices are the Center for Psychology in Schools and Education (pre-K to 12), Education Government Relations Office, Office of Executive Director -Administration, Governance and Communications, Office of Continuing Education Sponsor Approval, Office of Graduate and Postgraduate Education and Training, Office of Precollege and Undergraduate Education, and Office of Program Consultation and Accreditation.



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BEA also makes recommendations to the APA Board of Directors (BoD) and Council of Representatives (CoR) in service of APA's educational mission.

The larger educational community sends liaisons to attend BEA meetings and participate in discussions.² Building this broad coalition of organizations involved in education and training has moved the profession into a phase of cooperation, resulting in more consistent content across the field. The education community also built an advocacy coalition to educate policymakers at the state and federal levels about the important issues and funding needs for education and training in psychology (see Advocacy section).

The Educational Leadership Conference (ELC) was designed by BEA to bring together and enhance connections within the broader education and training community. Founded in 2001, ELC participants include APA governance members, division representatives, and participants from over 25 organizations external to APA concerned with education and training in psychology. ELC's goals include providing a forum for organizations—across all levels of education and training—to address issues of mutual concern. ELC promotes a shared identity among psychology's education and training leaders and focuses on how to affect public policy and funding regarding education in psychology and psychology in education. ELC topics are selected to reflect the educational zeitgeist and challenge educators to look toward the future. Topics have ranged from promoting excellence through assessment to interprofessional education and training, lifelong learning, ethics and education, globalizing psychology, and learning in a digital world. Diversity issues have been infused throughout these confer-

ences, with the 2005 conference focused especially on its importance (APA, 2005).

The history of psychology in education will be presented here in the sequence in which it is taught: high school, undergraduate, graduate, internship and postdoctoral training, and continuing education. That will be followed by the history of creating resources for graduate and postdoctoral students, preparing scientists and teachers, psychology's role in all education, and finally, educational advocacy.

Promoting the Teaching of Psychology in High Schools

Building a competent cohort of psychology teachers in secondary schools has been a major commitment over the past 25 years. Relevant curricular resources and association policies have been promulgated through the Directorate's Office of Precollege and Undergraduate Education and the Teachers of Psychology in Secondary Schools (TOPSS) established in 1992. During this time, high school psychology courses have become increasingly popular. Recent data from the National Center for Education Statistics found 30% of high school graduates take a psychology course (U.S. Department of Education, National Center for Education Statistics, 2011). APA's commitment to high school psychology teachers is reflected in the creation of an affiliate membership category for high school teachers, with some 2,577 high school teacher affiliates (APA, 2016d).

TOPSS developed resources designed to foster quality teaching and broaden high school student exposure to psychological science. TOPSS created and routinely updates a series of more than 20 comprehensive unit lesson plans for use by high school psychology teachers. These lesson plans contain timelines, outlines, resources, and in-class activities with topics from basic psychological science to special topics such as childhood obesity and life span development.

Since 2006, an annual workshop for high school psychology teachers has been held at Clark University (sponsored by Clark, APA, and the American Psychological Foundation). Workshops include lectures on building teaching skills and new research in psychology, as well as network-

² Groups that regularly send liaisons to BEA meetings: American Board of Professional Psychology, Association of Counseling Center Training Agencies, Association of Postdoctoral Programs in Clinical Neuropsychology, Association of Psychology Postdoctoral and Internship Centers (APPIC), Association of Psychology Training Clinics, Association of State and Provincial Psychology Boards, Council of Clinical Health Psychology Training Programs, Consortium of Combined-Integrated Doctoral Programs in Psychology, Council of Counseling Psychology Training Programs, Council of Directors of School Psychology Programs, Council of Graduate Departments of Psychology, Council of Professional Geropsychology Training Programs, Council of University Directors of Clinical Psychology, National Association of School Psychologists, National Council of Schools and Programs of Professional Psychology, National Register of Health Service Providers in Psychology, Psi Chi, Society for Personality Assessment, and VA Psychology Training Council. Liaisons from APA Divisions attend as well.



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ing opportunities between high school teachers and psychologists representing a range of expertise in the field.

High school psychology teaching is fostered through several awards given by the Directorate. First awarded in 2000, the APA TOPSS Charles T. Blair-Broeker Excellence in Teaching Award recognizes outstanding teachers in psychology. Building on the APF High School Psychology Network Grants (2011–2015), the APF High School Psychology Outreach Grants, begun in 2016, support innovative programs for high school psychology teachers and students by expanding access to networking, professional development and educational outreach.

Awards also have been created promoting high school students' understanding of the applications of psychological science. The TOPSS Competition for High School Psychology Students is an essay contest, began in 1993, challenging high school psychology students to apply psychological research to a topic such as promoting healthy aging (the 2017 topic). Through the Directorate, APA grants seven awards each year at the Intel International Science and Engineering Fair to projects focused on psychological science. These awards provide a highly visible showcase for the science of psychology.

Two APA policy documents directly focus on teaching high school psychology: the *National Standards for High School Psychology Curricula* and the *Guidelines for Preparing High School Psychology Teachers: Course-Based and Standards-Based Approaches*. The *National Standards*, approved as APA policy in 1999, were revised in 2005 and again in 2011 (APA, 2011b). Diversity is not a standalone topic in the *Standards* but rather one that is addressed throughout. The *Standards* are organized into the following:

domains, overarching and broad areas within psychology (scientific inquiry, biopsychology, psychological science); standard areas, closely related theories and findings; and content standards, which are topics to use to build lesson plans. Content standards are in turn linked to measurable student learning outcomes. The *Guidelines* were approved as APA Policy in 2012 and build on national standards to ensure teachers have requisite preparation by articulating models for training teachers including recommended content and measurable learning outcomes (American Psychological Association, 2012).

This focus on enhancing the quality of high school psychology courses continues with a planned 2017 summit on high school psychology. Participants at this working meeting will develop recommendations to enhance further the teaching of high school psychology. Examples of areas to be addressed include the following: psychology as a science, assessing student knowledge and skills in psychology, and identifying and credentialing the high school psychology teacher.

Undergraduate Education in Psychology

The growth of undergraduate education in psychology is of key importance to understanding psychology's history and future. Each year between 1.2 and 1.6 million college students enroll in an introductory psychology course. These courses are taught by 13,000 instructors, with 60% of all college students taking at least introductory psychology (Gurung et al., 2016). The major in psychology is one of the top four undergraduate majors, with more than 100,000 students earning a bachelor's degree in psychology each year (Norcross et al., 2016). The number earning an associate's degree in psychology more than doubled from 2001 through 2012 from 1,705 to 4,717 (National Center for Educational Statistics, 2017). The Directorate tracks the growth of undergraduate psychology by conducting periodic surveys and examining relevant national data.

Undergraduate educators at community colleges are an important constituency of the Directorate and are core contributors to undergraduate education. Since 2001, the Community College Teacher Affiliate membership category has created a network within APA, and membership increased from 913 to 1,197 between 2006 and 2016 (APA, 2016d).

Undergraduate education in psychology has been the topic of numerous conferences and reports. Brewer (1997) provides a comprehensive review of that history. The 1991 Street Mary's Conference, supported by the Directorate, with participants from 2- and 4-year colleges, developed a resource for faculty by collecting and integrating available information on the scholarship and practice of teaching and learning in undergraduate psychology. Topics included the following: curriculum, outcomes assessment, advising, faculty development, communication and collegiality, active



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learning, and inclusion of ethnic minorities as students and members of the faculty. Participants agreed that the liberal arts tradition applies to the study of psychology, with undergraduate students also learning to think scientifically about behavior and experience. A product of the conference was a book, *Handbook for Enhancing Undergraduate Education in Psychology* (McGovern, 1993). In addition, work of the conference led to the first version of the *Principles for Quality Undergraduate Psychology Education* (described immediately below).

Some of the most noteworthy contributions to undergraduate education have become APA policy. These include the *Guidelines* and *Principles Version 2.0* of the *Guidelines* (approved as policy in 2013, updating the original 2006 *Guidelines*; APA, 2016c), which outlined the learning goals for high quality undergraduate psychology programs. Articulation of guidelines for learning outcomes and teaching undergraduate psychology are important steps at a time when educational institutions are being held more accountable for outcomes.

The *Principles*, one of the outcomes of the 2008 national summit on undergraduate education in psychology, focused on how quality undergraduate education in psychology can best meet future challenges. Topics addressed included the use of new learning technologies, learning outcomes assessment, and increased diversity in students and faculty. Summit results were published in the *National Conference on Undergraduate Education in Psychology: A Blueprint for the Future of our Discipline* (Halpern, 2010). The current *Principles* also articulate recommendations to create high-quality educational systems (APA, 2011a).

Resources to assist in assessment of recommended learning outcomes have provided valuable tools for undergraduate programs in psychology. *The Assessment CyberGuide*, a compendium of assessment strategies, first created in 2002 and later updated in 2009, aligned with the recommendations in the 2006 version of the *Guidelines*. With approval of *Version 2.0*, recommendations to assess the learning outcomes articulated in that document then were addressed at the 2016 *Summit on National Assessment of Psychology*. The Online Psychology Laboratory (OPL), launched in 2005, is an innovative, interactive resource for teachers of psychology in high schools, community colleges, and baccalaureate institutions. OPL, funded by a National Science Foundation grant, in association with the University of Mississippi and the Directorate, provides online research studies in which students can take part and analyze resulting data.

Initiatives such as collecting and reviewing data on undergraduate psychology and recommendations from the Summit on assessment of psychology are ongoing and will help shape education into the future.

Master's Education in Psychology

Graduate psychology departments offer doctoral programs, master's degrees on the way to doctoral degrees, and terminal master's degrees. The total number of psychology master's degrees awarded increased by 54.2% from 18,457 in 2004 to 28,462 in 2013, with the largest number of master's degrees in counseling psychology (9,663 in 2013; APA Center for Work Force Study, 2017). Even with this growth, the role of master's education has been a controversial topic of discussion since the 1950s when APA policy proclaimed the doctoral degree as the minimum credential for independent practice. While some master's level psychologists work as part of research teams, the ongoing tension centers on clinical work, with the master's degree in psychology continuing to be dependent on oversight by doctoral level psychologists at a time when other master's level clinicians (e.g., social work, counseling, and marriage and family therapy) are eligible to be licensed for independent practice. Added to this is that many counseling psychology and school psychology doctoral programs also have master's programs or educational specialist programs, with the same faculty teaching in both programs.

In nearly every decade, APA committees have been formed and recommendations made regarding APA's position on master's level training. While national conferences on doctoral training have offered long-lasting recommendations, recommendations on master's education mostly have concluded that more data are needed. BEA formed task forces in 1991 and 2006; the 2006 group proposed a policy statement reviewed by APA governance groups with so little consensus that the master's degree policy was not

accepted. Another task force in 2014 developed a set of “Core Learning Goals” for master’s degree graduates consistent with a national focus on measuring educational program outcomes. Five outcomes, labeled as goals, regardless of subfield of study in psychology, are articulated and provide guidance for departments. As of this writing in 2017, another BEA document addressing this issue is being reviewed by APA governance groups with a goal for Council review and adoption as APA policy. If approved, this would represent the first educational resource developed by the APA specific to training at the master’s level. In addition, a Summit was convened in 2016 to consider the role of master’s training in psychological practice. The group recommended that APA “embrace both the training [at the] master’s level and accreditation for master’s degree training programs” (APA, 2016g, p. 23), but also reaffirmed that entry to the practice of psychology is at the doctoral level. The group made a number of recommendations, including examining the workforce implications of licensure and accreditation at the master’s level, but also acknowledging that this would likely be controversial. Indeed, the report generated considerable concern among some APA members leading the Chief Executive Officer of APA to issue a statement in April 2017 that clarified that the Summit recommendations did not signal a change in APA policy that affirms the doctoral degree as minimal educational level for independent practice. The Summit’s recommendations are being discussed as of this writing.

Doctoral Education in Health Service Psychology (HSP)

A significant amount of effort and resources over the past 25 years have gone toward developing educational policies and resources related to doctoral preparation for HSP. In the 10 years between 2004 and 2013, the number of psychology doctorates awarded by U.S. institutions grew by 31.7%, from 4,933 in 2004 to 6,496 in 2013. More than half (55.7%) of these doctorates were awarded in the “health service provider” categories (the greatest number being in clinical psychology) and 44.3% in various research subfields (the largest growth being in experimental psychology degrees; *APA Center for Work Force Study, 2017*).

The article describes a series of education and training conferences as central to developing policies and resultant content that helped shape the profession. Individual sections further explicate the history of competency-based education, education and training guidelines, and interorganizational efforts within psychology and across health care professions. Then the challenges that came with the internship imbalance, the crucial role of accreditation, and finally, the move to specialty education and training in HSP are described.

Education and Training Conferences

Grus (2016) illustrates psychology’s many different perspectives in a history of education and training conferences prior to, and including those of the past several decades. Psychology faculty were concerned about curricula—didactic and experiential. Those in internship and postdoctoral settings were concerned about how to enhance skills students brought with them from previous training. Licensing boards and regulating bodies were charged with overseeing the readiness of practitioner trainees to function as independent psychologists. Each group had expectations of the others, in addition to their unique areas of focus. Added to this were historical differences in philosophies of training (e.g., scientist-practitioner, practitioner-scholar) and differences across areas of psychology (e.g., clinical, counseling, and school). It would have been easy for these groups to splinter and focus exclusively on their own particular vision of training though each had the shared goal of producing competent psychologists.

During the 1990s and 2000s the Directorate worked to bridge these diverse perspectives by helping bring together educators via national conferences designed to facilitate recognition of overlapping interests, seek consensus, and produce consistent recommendations for the broader education and training community. For example, to address suggestions that postdoctoral training be eligible for APA accreditation (Larsen et al., 1993), the Directorate organized the National Conference on Postdoctoral Training (APA, 1995). Delegates developed a model, taxonomy, and criteria for accreditation of postdoctoral programs that were then integrated into CoA criteria in 1996. In the mid-1990s, concerns surfaced when it became clear that not all students were able to successfully find an internship. This problem was described as the “internship imbalance” or the “supply and demand” problem. In response, a conference was jointly organized by the Directorate and APPIC (Peterson et al., 1997). Three resolutions were passed. The first stipulated that all graduate programs publish information on program outcomes, including attrition rates and percentage of students securing internships, employment, and licensure. These remain accreditation requirements. The second recommended that entry to independent practice was at the end of the doctorate, and the third resolved that postdoctoral supervised experiences should continue to be available. These resolutions later became APA policy and marked a major change to the sequence of education and training in those states that adopted regulations consistent with this recommendation (as detailed later).

Competency-Based Education in HSP

The Directorate also has had a significant role in facilitating initiatives to promote competency-based education at the doctoral and postdoctoral level. Competency-based ed-

education focuses on defining and measuring student learning outcomes distinct from experiences formed around learning objectives or inputs. It also is criterion-based, leading to more precise measurement. Fouad and Grus (2014) outline several contextual factors that led to this attention to competency-based education including an increased demand for accountability by the public, a focus of accrediting bodies on learner-based outcomes, and other health care professions (such as medicine and nursing) moving to competency-based models for similar reasons. In addition, the APA (2006) recommendation that entry to practice be at the end of the doctorate rather than after postdoctoral supervised experience was a significant motivator to change training and licensure requirements. This put concomitant pressure on programs to demonstrate that students were competent at the time of graduation thus leading to assessment of competence as part of the accreditation standards. Eventually measurement of competencies will be part of the examination requirements for licensure.

This shift to a “culture of competence” (Roberts, Borden, Christiansen, & Lopez, 2005) began with the 2002 *Competencies Conference* (Kaslow et al., 2004). This Conference’s major goal was to identify core elements of the competencies that psychology trainees need to become a psychologist; not a trivial task considering the range of training models in the discipline. An initial survey, disseminated broadly to identify core competencies, found eight competencies cutting across training models: assessment, consultation, ethics, individual and cultural diversity, intervention, professional development, scientific foundations, and supervision (Fouad & Grus, 2014). An additional outcome of the conference was a three-dimensional model (a cube), with foundational competencies on one axis, functional competencies on the second, and developmental stages of education on the third (Rodolfa et al., 2005).

In 2006, the Directorate brought together a group to identify benchmarks based on the competencies described in the cube model for each stage of a psychologist’s training. The penultimate document resulted in three additional competencies (Professionalism, Teaching—separate from Supervision, and Advocacy). The final document was published (Fouad et al., 2009) along with a companion article on assessment tools for each competence area (Kaslow et al., 2009). Subsequent revisions added one more competence (evidence-based practice), clustered related competencies together, and moved behavioral examples to an appendix, making them easier to use (Hatcher et al., 2013). The Competency Benchmarks served as a framework for two APA policy documents: *Health Service Psychology: Preparing Competent Practitioner* (HSPEC, 2013) and *Competencies for Psychology Practice in Primary Care* (McDaniel et al., 2014). It also served as a beginning framework for revisions to the accreditation standards for HSP.

Early conferences in postdoctoral training in HSP were concerned with codifying training so programs could be evaluated for accreditation, particularly because most states required postdoctoral training for licensure. The 2016 *APPIC and APA Summit on Postdoctoral Training in Health Service Psychology* conference acknowledged that accruing hours of training was no longer the purpose of postdoctoral training. Rather, postdoctoral training now is designed for advanced specialization or enhanced competency (APPIC & APA, 2016). Among its recommendations, the 2016 conference called for the development of a task force to address competency assessment at the postdoctoral level.

Education and Training Guidelines and Policies

Like competency assessment, education and training guidelines and APA policy have developed to ensure quality and consistency in what a psychologist can do. Working with BEA, associated committees and task forces, and the broader educational community, the Directorate developed several key resources. Six key policies for HSP have been formulated and are discussed below (APA, 2009a; APA, 2015a). Each policy document reflects a multiyear process, including discussions within the Association and across the broader education community about relevant issues or challenges followed by drafting the policies and recommendations. Some policies take the form of an aspirational resolution or guidelines; others are crafted as required standards.

Given the size and complexity of APA, it is not unusual for policies to generate controversy. For example, in 2006 the APA CoR approved the policy, *Doctorate as Minimum Entry into the Professional Practice of Psychology*, asserting that hours of supervised experience accrued prior to the doctorate (e.g., on practicum) should be allowed to be counted toward the required hours of supervised experience needed for licensure. Proponents saw the policy as a mechanism for individuals to become licensed earlier in their careers, potentially allowing access to higher paying employment (Williams-Nickelson, 2006). Others feared potential regulatory confusion as some states adopted regulations consistent with the policy, others not, and still others adopted the concept with varied requirements. As of 2017, approximately 14 states have licensing laws consistent with this policy (Schaffer, DeMers, & Rodolfa, 2011). Language consistent with the 2006 policy was incorporated into revision of the *Model Act for State Licensure* (APA, 2010a).

Another example of controversial educational policies that followed social need was the change in some states to allow psychologists to have prescription authority. A series of related association policies are found in the *Recommended Postdoctoral Education and Training Program in Psychopharmacology* and the associated Designation process for training programs, as well as the *APA Model Legislation for Prescriptive Authority* (APA, 2009a, 2009b,

2009c). The 2009 approved revisions to the model curriculum updated the 1996 version and were organized around a competency-based model consistent with the competency-based education and training in other areas of HSP. Furthermore, a quality assurance process allows programs to be designated (not accredited) by APA provided they meet established criteria after review by the Designation Committee for Postdoctoral Education and Training Programs in Psychopharmacology for Prescriptive Authority.

Reflecting U.S. trends for greater accountability in education and training, the 2013 *Resolution on Accreditation for Programs that Prepare Psychologists to Provide Health Services* is an aspirational statement highlighting the value of program accreditation. The Resolution articulates a vision for self-regulation and quality wherein health service psychologists are trained for entry to practice only in APA/CPA accredited doctoral and internship programs or programs accredited by an accrediting body recognized by the U.S. Secretary of Education (see discussion of accreditation below.) The Resolution also expects accredited education to be a requirement for licensure as a psychologist. While aspirational, and not enforceable, the Resolution sets a goal for the discipline to implement its recommended changes within five years for doctoral programs and within seven years for internship programs.

The Health Service Psychology Education Collaborative (HSPEC, 2013), an interorganizational group, developed the policy, *Health Service Psychology: Preparing Competent Practitioners* that was approved by APA in 2014. HSPEC recommended that training models make a shift from a psychosocial to a broader biopsychosocial approach to health service. Competencies were developed to facilitate that shift and emphasize that HSP refers to the integration of mental health and substance abuse treatment, physical health, health promotion and disease prevention. Similarly, the *Competencies for Psychological Practice in Primary Care* (McDaniel et al., 2014) was developed to address the growing opportunities for psychologists to work in primary care settings and a resultant need to articulate competencies required to practice effectively given that setting's unique clinical and organizational characteristics.

As part of this focus on competencies and accountability, APA approved a policy outlining guidelines for the provision of supervision in HSP (APA, 2015a). While other professions (e.g., Association for Counselor Education and Supervision; Borders et al., 2011) and psychological associations (e.g., Australian Psychological Society, 2003) had articulated expectations for supervisors, this document was APA's first policy entirely focused on supervision. The guidelines contain a series of competencies that offer guidance for conducting quality supervision. Interorganizational Efforts within Psychology and Across Healthcare Professions.

The Directorate has sought to advance education and training by bringing together members of the training community to address cross cutting topics, as noted in the descriptions above of national conferences. Another approach was the Directorate's role in bridging across HSP training groups and fostering the development of the Council of Chairs of Training Councils (CCTC). Begun in 1985, CCTC brings together chairs of various training councils including those involved in doctoral, internship and post-doctoral training and those representing differing training models. This helps the training community (and, in fact, psychology in general) "focus [on] the common values and issues in professional psychology . . . for the purposes of wrestling with issues in the profession, identifying shared values, and pooling resources to address the issues and advance the profession" (Bell & Hausman, 2014, p. 47). CCTC has been part of initiatives such as the competency benchmarks, remediation plans for trainees with competence problems, communication between doctoral programs and internship sites, and resolving the internship imbalance.

Internship Imbalance

The internship is a critical component of accredited doctoral education and is typically a year-long immersion in practical work as a psychologist in training. The internship's purpose includes preparing students to enter the field with a solid foundation readying them for further specialty training (McCutcheon & Keilin, 2014). Students usually apply to several internship sites and then are matched to an internship through a computerized system overseen by AAPIC and based on site rankings of applicant competencies and training goals. In an ideal world, all students would complete their doctoral coursework and immediately secure an internship to complete their training.

As noted previously (Peterson et al., 1997), there had been an historical gap between the number of applicants and the number of internship positions. The primary problem was that the number of students in psychology graduate programs grew faster than the number of training positions in accredited internships. Initially, the imbalance led to conflict in the field about whether the cause of the problem rested on professional programs that historically admitted larger classes. However, as the imbalance grew, several steps were taken collaboratively by the education and training community in recognition that collective action was needed.

In 2008, a meeting was convened by the Directorate and APPIC with members of doctoral program training councils and American Psychological Association of Graduate Students (APAGS) to make recommendations and commit to actions to mitigate the internship imbalance (Grus, McCutcheon, & Berry, 2011). In this "difficult dialogue," doctoral programs were encouraged to establish minimum

criteria for students entering the match, then everyone committed to altering the imbalance by either increasing the number of internship positions or decreasing the number of students seeking internships. A toolkit for developing new internships was developed. APPIC created consultation mechanisms to help internship sites seek accreditation. At the request of BEA, in 2012 the APA CoR established a 3-year, \$3 million grant program to assist unaccredited internships programs seeking accreditation. By 2016, 48 grantees were accredited by CoA. These sites represented 230 new internship slots. In 2008, there were 3,492 intern applicants and only 3,058 positions. By 2016, 3,814 students participated in the match and 3,812 positions were offered (APPIC, 2008, 2016), thus mitigating the imbalance. This was a remarkable and positive example of interorganizational collaboration. However, efforts must continue to ensure an adequate number of accredited internship positions.

Integrated Care

Interorganizational collaboration has been a central component of efforts to promote the integration of psychological services within health care services. Recognizing that 51% of health service psychologists collaborate with other members of the health care team (APA, 2015b), efforts within the Directorate have focused on multiple collaborations with organizations that bring together health care professions at the national level to formulate policy and to discuss shared interests in education of the health workforce. For example, the Interprofessional Professionalism Collaborative (IPC) is a group of health professional organizations focused on professionalism in the context of teamwork, how it is defined and measured in students (Hammer et al., 2012). Psychology, as a member of IPC, ensures that materials developed by IPC are relevant for psychology training programs and promote understanding of the contributions psychology offers to team-based care. Work of the IPC has been presented at numerous national and international conferences.

The Directorate also is involved in an international approach to health professional education and collaborative practice as a member of the *Global Forum on Innovation in Health Professional Education* through the National Academies of Sciences, Engineering, and Medicine. The *Forum* offers a venue for discussion of current topics in health professional education that members believe are relevant. A series of *Forum* reports offer comprehensive reviews and recommendations including education on the social determinants of health and measuring the impact of interprofessional education.

An additional collaboration focused on interprofessional education is the *Interprofessional Education Collaborative* (IPEC). The IPEC, founded in 2009, promotes quality in-

terprofessional education leading to improved health outcomes. APA and the Directorate have been active from the inception and became an official member in 2016 when IPEC opened up membership to be more inclusive of the range of health care disciplines. The IPEC developed a set of *Core Competencies for Interprofessional Practice*, originally in 2011 and updated in 2016. Those have become seminal documents guiding the design of interprofessional education (Interprofessional Education Collaborative, 2016; Interprofessional Education Collaborative Expert Panel, 2011).

Another interorganizational group, the Integrated Primary Care Alliance, founded as part of Susan H. McDaniel's 2016 Presidential initiatives, focused on psychology and primary health care. The Alliance began with a meeting of 81 Presidents, and CEOs or government relations representatives from 23 health professional and patient advocacy associations that focus on primary care including psychology, medicine (Family Medicine, Internal Medicine, Psychiatry, and Pediatrics), nursing (RNs and NPs), physician assistants, and social work. The goal was to form an interprofessional network of associations that collectively can advance integrated primary care through policy, education, research, and innovation. Topics for the meeting were as follows: interprofessional education, policy initiatives, team-based care, emerging methods to evaluate rapid practice transformation, and bundled payment models. The response by participants was positive. Another effort spearheaded by Dr. McDaniel during her presidency was the development of an interprofessional curriculum for psychology students and other health professional learners early in their education, focused on cross cutting competencies needed for integrated primary care (APA IS-IPC Work Group, 2017).

Accreditation: Quality Assurance in Education and Training

From the beginnings of APA's commitment to quality assurance in education, accreditation has been designed to "achieve general agreement on the goals of training . . . encourage experimentation on methods of achieving those goals and . . . suggest ways of establishing high standards in a setting of flexibility and reasonable freedom" (APA Committee on Training in Clinical Psychology, 1947, pp. 539–558). For more than a half a century, education and training programs in HSP participated in the process of accreditation described by Altmaier (2003) as a complex system of self-regulation, quality enhancement, and peer evaluation. Nelson and Messenger (2003) provide a comprehensive review of that first half century of accreditation efforts, starting with the initial 1945 request to APA from the Department of Veterans Affairs seeking a list of graduate programs with "requisite capabilities to train clinical psychologists at the

doctoral level” (Nelson & Messenger, 2003, p 7). The review ends with 1991’s version of CoA’s expanded membership with representation of national psychology organizations and a charge to describe the scope, standards, and review procedures for accreditation (Altmaier, 2003).

In 1995, the *Guidelines and Principles for Accreditation of Programs in Professional Psychology* were approved. These guidelines broadened the scope of accreditation to include doctoral training programs that prepare students for the delivery of psychological services in clinical, counseling, or school psychology, combinations of those areas, and “emerging substantive areas of psychology.” Thus, for the first time, accreditation was available to programs preparing clinicians for new (emerging) specialty areas of practice. Accreditation review “shifted from the former checklist to a new consideration of breadth and coherence of the program’s philosophy, resources, and outcomes” (Altmaier, 2003, p. 55).

One aspect of BEA’s oversight role is periodic review of the composition of CoA. Given the growing numbers of accredited programs, the complexity of adding postdoctoral program reviews to CoA’s portfolio, and increased demand for representation on CoA by a wider range of communities of interest, BEA established the Advisory Council on Accreditation in 2003 (Board of Educational Affairs Advisory Council on Accreditation, 2004) to conduct a review. Major recommendations by this Council were for the following: (a) the accrediting body in psychology to become a 48-member *Commission* with full responsibility for all functions of nationally recognized accrediting bodies with from communities of interest, (b) the proposed Commission to have an affiliate relationship with APA affording greater autonomy, and (c) the Commission to convene a meeting of the communities of interest in accreditation—those represented on CoA and those not, for the purpose of discussing the Board of Educational Affairs Advisory Council on Accreditation report and developing a set of recommendations.

In 2005, a Summit was convened with a major goal to review the structure of CoA and the representation of organizations and communities of interest on CoA. Follow-up actions included renaming the Committee as a *Commission* and expanding the size of the peer review panel to 32 members with broadened representation of various organizations interested in the accreditation process. A recommended 10-year review of CoA composition is due in 2017.

Meanwhile, new *Standards of Accreditation for Health Service Psychology* were approved as APA policy (APA, 2015c). The standards state “. . . ‘health service psychology’ is defined as the integration of psychological science and practice in order to facilitate human development and functioning. HSP includes the generation and provision of knowledge and practices that encompass a wide range of professional activities relevant to health promotion, preven-

tion, consultation, assessment, and treatment for psychological and other health-related disorders” (p. 3).

Adams (2003) noted that accreditation “touches the sensitivities in all those involved . . .” and the process can be cast [problematically] as “. . . intruder, ogre, or bean counter” (p. 126). Even with such sensitivities, accreditation continues in earnest with 1,062 programs currently accredited by CoA across doctoral (392), internship (549), and postdoctoral education and training (121; APA CoA, 2016). The number and organizational diversity on CoA has expanded and changes to accreditation standards are made through open, transparent processes.

After 60 years of a unified accreditation system in psychology, in 2007 the Academy of Psychological Clinical Science launched its *Psychological Clinical Science Accreditation System* (PCSAS, 2011) intended “to foster superior doctoral-level training of clinical scientists[and] enhance the knowledge base for disseminating and delivering the safest, most cost-effective mental and behavioral health services.” PCSAS is currently recognized by the Department of Veterans Affairs and the Commission on Higher Education Accreditation, but not currently by the U.S. Department of Education. Using the clinical-science model of training rather than a competency-based model, McFall (2016) said PCSAS sets standards in “hopes that it serves as a magnet, attracting an ever-expanding circle of doctoral programs, encouraging them to strive for excellence and to adopt the clinical science model” of training (p. 23).

How a dual system of accreditation might be seen by the public; those seeking health services; funders of education, training, and research; state licensing regulators; and students seeking training as licensable health care professionals will be part of the future history of psychology education.

Education of Specialists in HSP

The recognition of specialties, and the education of specialists, are reflections of the discipline’s maturation in contemporary health care (Rozenky, 2013). Specialized care is increasingly important to health care consumers (Kaslow, Graves, & Smith, 2012) and organized health care settings (hospitals, clinics) expect their highest level providers to be “board certified” specialists (Rozenky, 2012). Recognition of specialties in professional psychology has been controversial at times, and fraught with inconsistent definitions. The Commission for the Recognition of Specialties and Proficiencies in Professional Psychology (APA, 1999) described a history of concerns about specialization as far back as the beginnings of APA itself.

In 1995 APA approved the establishment of CRSPPP as APA’s commission to review and recommend approval of specialties. The Council of Specialties (CoS, 1997) and Nelson (2013) detailed the history and various organizations

involved in the struggle to recognize specialties and the education of specialists. CRSPPP publishes criteria that any specialty seeking APA recognition must use to clarify distinctive patterns of professional education, training and practice that define their independent specialty. APA's does not credential individual specialists, nor does it limit their practice. State licensure recognizes individual competence to practice at the broad and general level, whereas individual specialists are recognized by board certification entities (e.g., the American Board of Professional Psychology). APA's role is to explicate education and training expectations for programs preparing the next generation of specialists.

In 2010, to resolve the lack of a consistent definition for the term "specialty" within professional psychology, CoS formed a work group (CoS, CoA, ABPP, and CRSPPP). CRSPPP presented a draft definition of "specialty" that was approved by CoS. Then CRSPPP recommended this definition to APA and it was accepted as APA policy in 2011. The policy delineates a *specialty* as a defined area of professional psychology practice characterized by a configuration of competent services for specified problems and populations. This requires advanced knowledge and skills acquired through learning in an organized sequence of education and training beyond the broad and general education and core scientific and professional foundations acquired through an accredited doctoral program. To further ensure consistent language surrounding specialty education, CRSPPP proposed, and in 2012 APA adopted as policy, guidelines describing *A Taxonomy for Education and Training in Profession in Professional Psychology Health Service Specialties*. This policy provides consistent descriptions for specific learning opportunities in education and training programs in HSP. The need for this was based on observations that training programs used a panoply of labels to describe a range of program offerings such as track, emphasis, concentration, subspecialty, and area of specialization, to name a few. Inconsistent labels are confusing to the profession, public, and especially students seeking to evaluate doctoral program offerings (Rozensky et al., 2015). This policy is intended to help solve that problem.

Continuing Education (CE)

An additional quality assurance function overseen by the Directorate involves CE for psychologists. The Directorate itself also develops and offers CE programs to psychologists.

In 1997 BEA convened a group to review what was called then the Committee for the Approval of Continuing Education Sponsors (CACES; [APA Sponsor Approval Review Group, 1998](#)). The review recommended that CACES be merged with the Continuing Education Committee. The Continuing Education Committee (CEC) has a dual mission

of CE sponsor approval and making recommendations for CE programming. This committee oversees APA approved sponsors, which now approach 800 ([APA, 2016e](#)), and approval of hundreds of convention programs offered for CE credit. CEC also oversees development of association policy promoting quality practices in designing and implementing CE for postdegree learners. In 2013, APA approved the *Resolution on Quality Professional Development and Continuing Education*, the first policy approved by APA related to CE. The policy articulates principles to foster quality in professional development and CE programming. This policy also influenced changes to the most recent iteration of the *Standards and Criteria for Approval of Sponsors of Continuing Education for Psychologists* approved ([APA, 2015d](#)).

Supporting these changes, the Directorate's original Office of Continuing Education became two separate offices, the Office of Continuing Education in Psychology and the Office of CE Sponsor Approval, each working with CEC, but with independent responsibilities. Technology has supported innovation in both offices; as of 2016, the sponsor approval application is completed via a Web based portal and, along with traditional CE at APA's annual APA convention, CE programs are offered as video-on-demand or as live broadcast webinars.

Initiatives Focused on Doctoral and Postdoctoral Students

While many of the initiatives described for doctoral and postdoctoral education are designed for faculty and supervisors, the Directorate has developed and promulgated a number of resources in the last 25 years to support those interested in graduate study—students in doctoral programs and postdoctoral fellows. These initiatives are relevant across all subfields in psychology. The resources also highlight how the widespread adaptation of the Internet has changed how the Directorate is able to connect with its constituencies.

For prospective graduate students, the annual publication of the book *Graduate Study in Psychology* provides a detailed listing of programs in psychology to assist potential graduate students in their selection process. A new online search function of over 500 programs in psychology now has the ability to compare programs on certain characteristics. *Graduate Study in Psychology* complements the robust resources for prospective graduate students available on the APA website. The website includes guidance on selecting graduate programs, applying and getting into graduate school, and information about career options.

The Individual Development Plan (IDP) is a career development resource primarily for postdoctoral fellows that encourages students to think critically about their skills, interests, abilities, and experience in selecting a career path-

way and looking for jobs. It provides a structure for conversations between students and their mentors specific to career development. Greater use of IDP's in psychology was recommended by Bangasser et al. (2016). In response, the Directorate developed an IDP resource that features short "how-to" videos, sample documents, and downloadable guides on the process of creating and updating an IDP.

Preparing Future Faculty

The Psychology Partnerships Project (P3; APA, 2001), begun in 1996, was a 5-year initiative of BEA and the Directorate, designed to promote and facilitate partnerships among psychology teachers in high schools, community colleges, 4-year colleges and universities, and graduate programs. It also encouraged partnerships among psychology teachers, community agencies and businesses. Considered an early success of the Directorate (Clay, 2010), P3 yielded 61 presentations and at least 38 concrete products (new partnerships, conferences, published articles, and resources for teachers at all levels). All projects involved teachers from at least two academic levels in the development or implementation process of projects. The success of P3 was noted by acquisition of external funding for many projects, and participants reporting enhanced teaching skills. APA has participated in several initiatives preparing graduate students to become competent educators, fulfilling the responsibilities of the professorate as classroom instructors, scientists, and involved citizens of the university and community (Buskist, Beins, & Hevern, 2004). One of the most notable is the *Preparing Future Faculty* Program (APA, 2016e). In 1999, the Directorate was awarded a grant to participate in a then-new initiative, *Shaping the Preparation of Future Social Science & Humanities Faculty, Preparing Future Faculty* (PFF). PFF focused on preparation of interested graduate students to become psychology faculty members. At the same time, the Directorate sponsored a listserv-based forum for graduate students and educators to discuss the teaching of psychology. Both APA (2002) and Buskist et al. (2004) provide information about the course offerings and teaching practicum that were part of several PFF participating institutions. For example, Benassi and Fuld (2004) describe a two semester proseminar required of all first-year students in their graduate program that helps students interact with faculty as mentors and role models, prepare a first-year talk on research and teaching, and develop their professional identity as future faculty. Later in their education, students participated in a Teaching of Psychology Practicum/Seminar where faculty use video to review student's teaching skills and help them prepare research and teaching-related job talks.

A survey of the first cohort of psychology graduate students who participated in the PFF program found students praised the program. They said they might not have consid-

ered an academic career without PFF, and that potential employers were impressed with their knowledge and skills when applying for academic positions (APA, 2006). The Council of Graduate Schools (2011) provides a broader picture of the measurement, data and outcomes of the PFF approach to professional development programs for graduate students.

Nelson (2004) described the Directorate's involvement in the 1990s with the Campus Compact (<https://compact.org/>) and the movement to engage faculty and students in service learning opportunities. As part of the Directorate's involvement in *Preparing Future Faculty*, the Directorate prepared a faculty development bibliography with readings on civic engagement and service learning.

As an integral component of building psychology's future as a scientific discipline, the Directorate (APA, 2010b) participated as part of James Bray's APA presidential initiative and Task Force designed to make certain that psychology is seen as a core science, technology, engineering and mathematics (STEM) discipline and that educators and learners in psychology, at all levels, are educated in such a manner that they can contribute to society to the full extent expected of a STEM discipline. This is consistent with STEM education as a national priority. The Task Force noted that psychology is often excluded from STEM funding for education and training programs, and offered several recommendations to address this problem. They describe how psychological research both informs the study of the sciences, mathematics, and technology and that psychology, as a STEM discipline itself, uses science, mathematics, and technology in its work. They offer numerous recommendations to increase psychology's recognition as a STEM discipline, and importantly offer recommendations to the discipline itself to enhance its role as a STEM discipline. Psychology education recommendations included increasing resources for the teaching of psychology as a laboratory science at the high school, community college, and college level; including psychological science courses among those required for general STEM education at high school, undergraduate, and postgraduate level; increasing the proportions of women and minorities obtaining advanced degrees in fields of psychological science; and including instructors of psychological science in initiatives to expand the number of well-trained STEM teachers at all levels.

Psychology in Education

The application of psychological science to education offers an opportunity to positively impact educational outcomes across the life span. Begun in 1990 and revised in 1997, the Learner-Centered initiative was a major focus of the first decade of the Directorate (APA, 1997). Learner-centered psychological principles provided research and practices designed to be useful information for the redesign

of the educational system. The goal of this initiative was “the betterment of America’s schools and the enhancement of the nation’s vital human resources” (p. 1). Fourteen psychological principles pertaining to the learner and the learning process were described including cognitive and metacognitive factors; goals for the learning process; how the learner links to existing and new knowledge; issues related to thinking, motivation and emotion; and the intrinsic motivation to learn. Building on the goal of enhancing quality education, the *Coalition for Psychology in the Schools and Education* (Coalition), supported by the *Center for Psychology in Schools and Education* (CPSE), was established by the Directorate in 2002. To promote cooperation, the Coalition brings together leaders from 13 APA divisions and other affiliated groups with interests in K-12 education (Rollin, Subotnik, Bassford, & Smulson, 2008). As a resource to both educators and policymakers, the Coalition develops connections between psychology and public education so that psychological knowledge can be shared with relevant stakeholders and applied by the broad education community. The Coalition’s many projects include a 2005 survey of teachers’ professional development needs that served as impetus for an online classroom management course. The Coalition provided guidance on legislation such as *No Child Left Behind* and the *Higher Education Act*. A recent, impactful product developed by the Coalition is the *Top 20 Principles from Psychology for PreK-12 Teaching and Learning* highlights psychological science relevant to preK-12 classroom teachers.

A second CPSE coalition looks at high academic performance in youth: how psychological principles and science contribute to high performance, and how high performance is investigated in psychology. Focusing on talent broadly, in 2001 CPSE began the *Center for Gifted Education Policy*, initially funded by an American Psychological Foundation grant. The Center focuses on enhancing performance of gifted and talented children and adolescents through advocacy, resources, and research.

Additional groups convened by the CPSE enhance education through applications of psychological science. One critical issue at the forefront of education policy is the relationship between teacher preparation programs and student learning. Psychological science has much to offer with respect to measurement of behavior and methods to evaluate teacher education programs. Working with the *Council for Accreditation of Educator Preparation*, BEA formed a group to guide teacher educators and policymakers on the use of data to facilitate program improvement and accountability. In 2014, *Assessing and Evaluating Teacher Preparation Programs* was received by APA CoR (Worrell et al., 2014).

The Directorate, through CPSE, has provided resources to enhance teaching and learning responsive to challenges faced by classroom teachers. A series of 10 modules for teachers was developed to address common needs and problems in the

classroom that can be informed by the application of psychological and educational science. Topics include bullying, classroom management, and student-teacher relationships.

Critically evaluating evidence that underlies educational policy in schools is another focus of CPSE. For example, in 2006 a report was received by the CoR that reviewed the evidence behind zero tolerance policies for violence by students while in school. The report noted the data available to test the assumptions behind such policies were both limited and supported beliefs to the contrary. Recommendations were made for reform of educational policy and alternative practices. Another timely topic was classroom safety for students and teachers. In 2011 CoR received a report on preventing violence against teachers that detailed the scope of the problem, predictors of violence against teachers, evidence-based classroom behavioral management strategies, and recommendations for research to curtail violence (Espelange et al., 2013). While most of the initiatives described in this paper include specific attention to issues of diversity, in 2012 the CoR received a report that explored the contributions of psychological science to ethnic and racial disparities in educational attainment. This report provides a review of the evidence regarding disparities, and recommendations for research, educational practice, and advocacy focused on K-12 education.

Collaborations with other organizations interested in educational research such as the National Research Council, the American Educational Research Association, and the National Science Foundation also are evident in the work overseen by CPSE. A 2004 guide was developed looking at social interventions. This resource, *A Guide to Incorporating Multiple Methods in Randomized Control Trials to Assess Intervention Effects*, is for researchers as well as policymakers and school administrators.

To increase the number of psychological scientists conducting research at the interface of psychology and education, the Directorate was awarded a grant from the U.S. Department of Education to create the *American Psychological Association/Institute of Educational Sciences Postdoctoral Education Research Training Program* (APA/IES PERT) in 2003. PERT established a research training program matching promising psychologists with grant funded mentors to develop education and training models that advance school-based research (including early childhood education) and increase visibility of education research within psychology. The objective was to increase cutting edge psychological science to address our nation’s needs for high quality research on teaching, learning and achievement of preK-12 students.

Political Advocacy for Education in Psychology

Over the past two decades, the education community in psychology has developed and grown its political advocacy activities. In 2001, \$2 million dollars were secured in the Federal budget to support the Graduate Psychology Education

(GPE) program in the Bureau of Health Professions. This was accomplished by the Directorate's Education Advocacy staff, assisted by a grassroots network of psychologists trained by APA Governance Relations Staff to talk with their representatives in Congress about the importance of funding education in psychology. The GPE program funds "planning, development, operation, and maintenance of accredited graduate, doctoral, doctoral internship, and doctoral residency programs that foster an integrated approach to health care services [for] underserved populations . . ." (Health Resources and Services Administration, 2016a, p. 1). While dollar amounts fluctuated since initial funding, increasing to \$7.9 million in FY 2015, GPE has been a consistent funding source benefiting over 1,500 psychology graduate students.

Belar (2005) noted how barriers to advocacy have existed because APA, a tax exempt organization, is prohibited from extensive political advocacy. To address barriers to advocacy, in 2005 the board of directors of the American Psychological Association Practice Organization (APAPO) established the *Education Advocacy Trust* (EdAT; Belar, 2005) culminating 3 years of collaboration between Education and Practice Directorate staff, BEA, and the Committee for the Advancement of Professional Practice. EdAT, supported by contributions to a fund within the APAPO that is separate from APA dues, is legally able to carry out political activities in support of educational issues. In 2012, the APAPO-PAC (Political Action Committee; APAPO, 2016) was created, dedicated to financially supporting political candidates who are "addressing practitioners' and educators' concerns such as reimbursement for psychological services, inappropriate barriers to psychologists' scope of practice, and funding for psychology education."

There are 168 university and college campuses represented by trained Federal Education Advocacy Coordinators where none existed prior to 2000 (APA, 2016f). Thus, along with GPE funding, educational advocacy has resulted in support for psychological services for suicide prevention in the *Campus Care and Counseling Act* (Garret Lee Smith Memorial legislation; Walrath, Garraza, Reid, Goldston, & McKeon, 2015), the 2006 Defense GPE Program & Center for Deployment Psychology helping meet psychological health needs of returning service members and families, funding for increased psychology interns via the Behavioral Health Workforce Education and Training grant program (HRSA, 2016b), and educational loan repayment for psychologists via the *National Health Service Corps* (2016; Belar, 2005, 2010). As part of ongoing advocacy work with HRSA, psychologists serve on the *Advisory Committee on Interdisciplinary Community Based Linkages* (ACICBL) including chairing that committee during advocacy for inclusion of interprofessional care in the ACA (ACICBL, 2010).

Rozenky (2014) argued that advocacy is an important learning outcome across all psychology education programs. HSPEC (2013) went further listing advocacy for

science, practice, education, patients' rights, and quality health care as a competency expected of all health service psychologists. To meet this learning objective, APA prepared materials for graduate and continuing education; a *Psychologist's Guide to Advocacy* and *PsycAdvocate*, a five-module program, teaching skills as effective policy advocates at federal, state, and local levels.

The Future of Education and Training in Psychology

Over the past quarter century the history of APA's educational mission reflects a balance between Abraham Lincoln's belief that "The best way to predict your future is to create it" and Franklin Roosevelt's understanding that "We cannot always build the future for our youth, but we can build our youth for the future." The following require ongoing attention to continue to build psychology's successful future:

- A strategic vision for education in psychology requires APA, and all educators, to systematically develop robust workforce data regarding how many psychologists to educate and in which areas. This data must be based on society's demand for the psychology workforce in all its branches (Rozenky, Grus, Belar, Nelson, & Kohout, 2007).
- Continued, cooperative work must delineate psychology's core knowledge—what defines a psychologist—including consistent definitions and educational outcomes for each of psychology's scientific subfields and health service specialties (Bangasser et al., 2016).
- Agreement on the extent to which online education will be permitted as components of psychology education will be required to make certain we continue our commitment to the highest quality of education and training (Rozenky, 2013).
- Similarly, assuring that the public, other professions, policymakers, and funding sources, all see psychology as a true STEM discipline will be key to a successful future—with our health services respected as evidence-based (Lilienfeld, 2012).
- And, the education and training community must ensure the future workforce is prepared for both interprofessional practice as proponents of the biopsychosocial model in health care and as members and leaders in team science in the academy.

These historical trends across education and training in psychology create scenarios focused on psychology as a science, quality assurance, competency-based education and practice, multicultural competencies, interprofessional education, service to society, and quality learning opportunities in psychology from high school through undergraduate, graduate, postdoctoral, and lifelong learn-

ing. Psychological science must continue to contribute to enhancing education for all citizens, kindergarten through lifelong learning.

Over the past quarter century APA has helped *create the future* by establishing policies setting the tone for tomorrow's successful educational environment. That environment must ensure that psychology creates, in all its scientific and applied branches, quality educational programs that build a competent workforce prepared for, and adaptable to, the changing social, cultural, scientific, educational, health care, and technological world of tomorrow.

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