Guidelines for the Establishment of a University-Based Practical Training System

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Abstract Individuals interested in applying to sit for a Behavior Analyst Certification Board® (BACB) examination are required to accumulate a predetermined number of experience and supervision hours under the BACB Experience Standards (BACB, 2015c). Currently, the BACB allows students to accumulate these hours while enrolled in a higher education training program that contains a BACB-Approved Course Sequence (ACS). There are numerous professional and financial benefits for programs offering practical training opportunities to students. However, creating a viable practical training system requires careful planning and organization. The purpose of this paper is to provide some guidelines and recommendations for establishing one type of university-based practical training system using community-based sites.

Keywords Practicum · Supervision · Certification · Experience

Over the last 15 years, the number of Behavior Analyst Certification Board® (BACB) certificants has increased significantly and continues to rise (Deochand & Fuqua, 2016).

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There are currently over 23,000 certificants holding the BCBA®-D, BCBA®, or BCaBA® credential and over 18,000 individuals holding the Registered Behavior Technician credential (BACB, 2016b). As the number of individuals pursuing this credential increases, it is important that the field take stock of how it is preparing these practitioners.

Supervision of professional practice is one area, in particular, that has recently received some attention in the literature. Several authors have provided recommendations for conducting supervision using unique approaches in an ethical and effective manner. For example, Hartley, Courtney, Rosswurm, and LaMarca (2016) described the benefits of developing and adopting an apprenticeship model of supervision, whereas Brodhead and Higbee (2012) described the importance of incorporating ethical training and evaluating its effects within an organization's management and supervision systems. Sellers, Alai-Rosales, and MacDonald (2016) also provided recommendations for ethical supervision but, this time, in the context of the BACB's new Professional and Ethical Compliance Code for Behavior Analysts (BACB, 2014). Likewise, Turner, Fischer, and Luiselli (2016) advocated for an ethical, competency-based supervision model by providing the field with a new assessment tool known as the Supervision, Monitoring, and Evaluation Form. Additionally, Sellers, LeBlanc and Valentino (2016) offered guidance to supervisors in addressing common issues that may occur during supervision, such as disorganization and poor time management, poor interpersonal skills, and difficulty accepting and applying feedback, whereas Sellers, Valentino, and LeBlanc (2016) provided five practice guidelines for supervisors seeking to develop and maintain quality supervisory relationships with supervisees.

One area, in particular, that has not received as much attention is the development of supervision systems within behavior analytic training programs. Practica is a vital component in

many higher education professional training programs. These courses provide students with an opportunity to develop a professional repertoire that they will come to rely on after they graduate. In behavior analytic training programs, practica also allows students to accumulate the experience and supervision hours required to sit for a Behavior Analyst Certification Board (BACB) examination (BACB, 2015c). However, certain conditions must be met before a program can offer students the opportunity to accumulate hours toward certification under the BACB's practicum and intensive practicum experience categories. Specifically, the program's curriculum must contain a BACB-Approved Course Sequence (ACS), offer practical training courses that align with the BACB's published experience standards (BACB, 2015c), and submit an application for approval to offer training opportunities under the BACB's practicum and/or intensive practicum experience categories.

There are several benefits to programs offering students the opportunity to accumulate hours under the BACB's two practical training experience categories. First, providing students with the opportunity to accumulate hours in practica allows them to immediately apply what they are learning in their didactic courses (Parsons, Rollyson, Iverson, & Reid, 2012). This provides instructors with valuable information about the students' abilities in a professional setting and creates opportunities to shape ethical behavior (Brodhead & Higbee, 2012). Moreover, the training being conducted within practica can help inform the content being taught within the students' didactic courses. Second, under the BACB's practicum and intensive practicum experience standards, students are required to accumulate fewer experience hours while still receiving more hours of supervision each week. This allows supervisors more opportunities to shape professional repertoires, which may benefit not only the student but also the clients that they serve (Dixon et al., 2016; Eikeseth, Hayward, Gale, Gitlesen, & Eldevik, 2009). Third, when community sites and supervisors are available, practica provides students with an opportunity to foster relationships early in their career with community partners who may serve as future employers. Fourth, when available, establishing partnerships with community sites can help establish a feeder system for future applicants to the program. Fifth, from a marketing perspective, programs offering students the opportunity to complete their degree, coursework, and experience hours can advertise these benefits to students and differentiate their programs from their competitors. Finally, students who need to accumulate experience hours after completing a BACB ACS are delayed months or even years from taking their BACB certification examination: a multiple-choice test largely based on the content reviewed during their training program. Although an empirical question, this delay may negatively impact the number of graduates who finish their experience requirements and pass their examinations on their first attempt (BACB, 2015a, b). Low

first-time pass rates on the BACB certification exams may negatively impact a program's marketability to potential applicants interested in becoming BACB certified.

As of March 2016, the Behavior Analysis Certification Board (BACB) listed 295 institutions with ACS on their website (www.bacb.com). Of these programs, only 125 institutions are listed as offering practical training opportunities under the practicum and/or intensive practicum experience categories. Accumulating hours under these experience categories requires careful planning and organization on the part of the training program, students, and supervisors (Sellers et al., 2016; Turner et al., 2016).

Each training program has its own mission, goals, and considerations that will dictate how practical training should be implemented. For example, the recommendations contained herein may not be applicable to a training program that has a primary emphasis on research as opposed to practice. Additionally, some of the recommendations for developing community-based sites may not be applicable to programs that rely primarily or solely on internally developed practical training sites. The purpose of this paper is not to provide a one-size-fits all set of recommendations for implementing a practical training system. Instead, the purpose is to offer some guidelines and recommendations for developing one type of community-based practical training system that meets the BACB experience standards within a university-based behavior analytic training program. These guidelines and recommendations should be evaluated and modified within the context of each individual training program (see [Appendix](#)).

Practical Training Participants

At least five parties are involved when students accumulate supervision and experience hours toward BACB certification through a training program. These parties include the program administrators, the instructor, the students (or supervisees), the supervisors, and the partnering practicum agencies or sites. It is recommended that each of these parties has a clearly articulated role in the practical training process to ensure that a predetermined number of hours are accumulated ethically across diverse settings, populations, and supervisors in the context of the BACB experience standards.

Training Program Responsibilities

The program offering practical training experiences to students pursuing BACB certification has four primary responsibilities: (1) requesting and maintaining approval from the BACB to offer practical training experiences under the BACB's practicum and/or intensive practicum experience categories; (2) the language used when advertising and

describing the practical training experiences being offered; (3) developing the processes, policies, and procedures embodied in a practical training handbook; and (4) for assigning a practicum instructor to oversee practical training.

Seeking and Maintaining Approval for Practical Training

A program must be designated as a BACB ACS to receive approval to offer practical training under the practicum and/or intensive practicum experience categories. However, holding the ACS designation does not guarantee that a program will receive approval from the BACB. For example, practicum syllabi submitted with the application must demonstrate compliance with the BACB's experience standards (BACB, 2015c) and practicum supervisors must meet the BACB's supervisor requirements (BACB, 2012). Program administrators interested in offering training under the BACB's practicum and intensive practicum experience categories will need to contact the BACB to request an application and information about their approval process before offering students the opportunity to accumulate hours under these experience categories. Likewise, the program is responsible for ensuring that they maintain their eligibility by monitoring changes to the standards and updating their records in a timely fashion.

Describing Practical Training Opportunities Programs must carefully vet the language that they use to describe the practical training experiences that they offer. Regardless of how practical training is conducted, it is recommended that programs avoid promising applicants and students that they will accumulate the hours necessary to apply for their certification examinations while enrolled in the program. Instead, it is recommended that programs only promise that they will offer applicants and students the *opportunity* to accumulate the hours necessary to apply for their certification examinations. The difference in wording is minor, but important, and helps to stipulate the responsibilities of all parties involved. Certification is a credential earned by an individual, not a program. A program can create contingencies designed to compel students to follow the BACB's experience standards, but ultimately, it is the student's responsibility to ensure that they are operating in compliance with the standards. Avoiding these types of promises may also prevent future litigation from students who fail to accumulate their hours, despite the program offering plenty of practical training opportunities.

Training programs should acknowledge the distinction between meeting practicum requirements and meeting BACB experience standards. While contingencies can be developed to ensure that BACB experience standards are being met by students, training programs operate differently than the certification board and it is not possible to create the same consequences for the same behaviors. For example, a student who misses a group supervision meeting may see a slight drop in their practicum grade. However, this same student may also

find themselves in a position where they are unable to count all of the experience hours accumulated during that supervision period because the percentage of supervision does not cover all of their hours. Additionally, a student who receives poor professionalism scores on a BACB supervision form may see their practicum grade impacted as a result. However, they may not see any repercussions when using those same supervised hours to apply for their BACB certification examination. Finally, program administrators may want to consider stipulating at the outset that a student who meets the experience hour requirement for the BACB certification examination has not necessarily met the hour requirement assigned in their practicum course. Clarifying this distinction in the practicum syllabi and practical training handbook may help prevent any misunderstandings between the student and the instructor.

Developing a Practical Training Handbook It is recommended that programs document their policies and procedures in a practical training handbook. To document that students have received the handbook, administrators could require that students sign a verification statement attesting that they have read and agree to comply with the content included in the handbook prior to starting the practical training. At minimum, the handbook can be used to provide students with a description of the program's mission and objectives, contact information, expectations and responsibilities, practicum training schedule, course descriptions, and practica policies and procedures. Relevant content under the missions and objectives section may include the program's mission, values statement, program objectives, program goals, and professional and ethical standards. Likewise, relevant content in the section covering expectations and responsibilities may include a description of student, supervisor, instructor, and program responsibilities in the context of practical training so students understand the role of all parties involved. Moreover, the content included in the practicum training schedule section could specify the orientation training agenda, the anticipated number of direct and indirect hours that students are expected to accumulate for each course, the schedule for auditing student supervision records, and the contingency plan that the program uses to ensure that minimal experience hour requirements are met during weeks with unanticipated events (e.g., snow days, sick supervisor). Additionally, the course description section of the handbook could provide students with syllabi information related to their practicum coursework (e.g., course descriptions, objectives, required readings, meeting schedule). Finally, the handbook's policies and procedures section could describe various program rules and processes relevant to practical training, including, but not limited to, policies around background checks, professionalism (e.g., attendance, dress code, paid practicum placements), communication, practicum site assignments, employment, health and safety (e.g.,

emergency contacts, CPR/BLS certification, health insurance, immunizations, incident reporting, physical requirements), record keeping (e.g., BACB supervisee training, supervision contracts, supervision forms, experience verification forms, hour tracker), remediation policies (e.g., warning, probation, dismissal), and grievances (e.g., due process guidelines, practicum complaints, site complaints).

Assigning a Practicum Instructor It is recommended that the program administrator take into consideration the qualifications, experience, time allocation, and interpersonal skills required before assigning a practicum instructor. While some skills may overlap, overseeing practical training requires a different repertoire than teaching didactic coursework. Programs serious about developing robust practical training experiences for their students may want to consider hiring a full-time practicum director to manage the system, students, supervisors, and sites. A full-time practicum director is well placed to develop rapport with both supervisees and supervisors to ensure that placements are made with consideration of the supervisee's existing repertoires and supervisor's strengths and needs. For example, if a supervisee needs more experience with parent training, they can be assigned to a site and a supervisor who conduct parent trainings frequently. Finally, it is recommended that placements are made with respect to the learning objectives outlined in the practica course each semester. The practicum director can assess the learning opportunities available at each site and determine the semester in which the site would be most relevant. If a student does not master the learning objectives within the designated time, they could potentially continue their placement with additional supervision. Practical training should be treated as a major component within training programs trying to produce behavior analytic scientist practitioners. What students do at their practical training sites will likely closely emulate the professional work that they will be performing after graduating.

Programs have an opportunity to attract future students and tuition dollars by sending well-qualified and professional students into the community. For better or worse, students assigned to practicum sites in the community function as ambassadors for their training programs. With proper oversight, programs will be aware when a practicum site is experiencing issues with a student or vice versa and can remediate the situation before it becomes a problem. As a result, behavior analysts working at these sites may be more likely to supervise students in the future and recommend the program to co-workers and colleagues.

If practica is treated as a major component within a training program, it is recommended that it be offered consistently throughout a student's tenure. The increased tuition collected from offering practica on a regular schedule could be used to offset the salary and fringe benefits involved in hiring a full-time practicum director. As another cost-saving measure,

programs may consider hiring an experienced qualified masters-level clinician, as opposed to a doctoral-level faculty member. In some cases, it may even be more beneficial to hire a masters-level clinician with experience applying behavior analysis as opposed to a doctoral-level faculty member who may have limited experience outside the classroom and the research laboratory.

Instructor Responsibilities

The instructor charged with overseeing practical training should be a BCBA or a BCBA-D in good standing capable of meeting and maintaining the BACB's supervisor qualifications before teaching their first class. Ideally, it is recommended that they have varied experiences applying behavior analysis across settings and populations so they are in a good position to promote and serve as a resource in diverse contexts for their students and supervisors. In this role, it is recommended that practica instructors divide their time carefully across teaching, supervision, and administrative responsibilities.

Teaching Teaching responsibilities may include activities such as creating assignments, overseeing goal setting, managing practicum course projects, providing on-site training at practicum sites, and/or overseeing peer mentorship opportunities between senior and junior students.

In order to ensure that supervisees acquire the behaviors necessary to become scientist practitioners, the use of sequenced curricula is recommended. Instructors may assign a practicum textbook and create assignments that help guide supervisees practical training (see Relias Learning, 2016; Sulzer-Azaroff, Dyer, Dupont, & Soucy, 2012). When working with community partners, it may be helpful to create a syllabus with structured weekly activities to ensure that all students are getting a similarly robust training experience. The structure can be faded across semesters to ensure that supervisees can manage their own behavior with respect to their client and site's needs by graduation. For example, the practicum instructor could assign work for 100 % of the indirect hours accumulated during the first semester of practicum, assign work for 75 % of the indirect hours accumulated during the second semester, assign work for 50 % of indirect hours in the third semester, and so on, until the supervisee is eventually setting their goals and creating their own tasks to account for all of their indirect experience hours. Under this arrangement, goal setting can be used to allow site supervisors to apply a grade for a supervisee's work while still ensuring that the practicum director has oversight on clinical training.

It can be difficult to identify a clear and consistent way to grade practicum coursework when site assignments and supervisors are varied. This may lead practicum instructors to base their grades on products only indirectly related to

performance (e.g., number of hours worked, supervision sheets on file). One way to link performance to grades within a practical training system is to incorporate goal setting and self-monitoring. This is accomplished by requiring students to set their own weekly weighted goals that produce verifiable products. Goals can be set so that the activities chosen, hours permitted, and the weights assigned are agreeable to the student, instructor, and on-site supervisor. For example, a student may set the following goals during a given week: show up to all sessions on-time and prepared (weight 15 points, 10 h, direct); collect interobserver agreement data on tying shoes (weight 15 points, 15 min, indirect); provide procedural fidelity feedback to parents implementing a feeding protocol (weight 30 points, time 1 h, indirect); and find, read, and write a summary for two articles about toilet training (weight 40 points, time 2.5 h/article, indirect). These goals could be verified and scored during weekly supervision meetings by reviewing the time log, asking the student to bring their completed IOA data sheet, procedural fidelity data sheet and notes to parents, and two one-page article summaries. Supervisors could systematically reduce the time allowed to write protocols or graph data to create efficient on-task behavior. Allowing students to set their own goals and monitor their own performance teaches them to manage their time effectively. Additionally, it teaches supervisees to identify what is needed for a particular client, take initiative with respect to case conceptualization, and execute on stated goals. These behaviors will likely benefit supervisees after graduation. This arrangement also helps to organize supervision meetings by setting the occasion for students to seek feedback on previous goals and initiate professional self-improvement by setting new goals for the upcoming supervisory period. Finally, this arrangement helps supervisors meet the BACB's requirement of reviewing written products during each supervisory period. To save time and ensure that work is being completed as stated by the students and the supervisors, the practicum director could create an indiscriminable contingency by conducting random audits on student work. During a random audit, the instructor could review the products tied to the goal(s) that the student reported meeting. Students failing to produce the products tied to their goals could lose points toward their grade as specified in the course syllabus. Students falsely reporting goals met could meet disciplinary action for violating professionalism standards as specified in the program's practicum training handbook.

In addition to guiding clinical practice, assignments completed during practicum may be used by students to build a portfolio to differentiate their applications when applying for jobs after graduating. These portfolios may also function as a marketing tool for the program by serving as a sample of the practical training experiences offered within the program. Finally, portfolios could be used by the practicum director to ensure that depth of training is not being sacrificed when

fulfilling the BACB's recommendation that supervisees have multiple experiences with multiple supervisors (BACB, 2015c).

Supervision Practicum instructors may need to offer both individual and group supervisions to their students. However, by relying on qualified BCBAs and BCBA-Ds in the community to provide the bulk of the individual supervision to students, the practicum instructor can allocate their time to providing feedback on indirect work, giving additional assistance where needed (e.g., supervisees, supervisors, or sites), and structuring group supervision meetings. Under this model, the practicum instructor would have constant access to students and would only provide individual supervision under certain circumstances. Although it may not be practical for all training programs, assigning students to community-based sites is an excellent way to meet the BACB's recommendation that supervisees have multiple experiences with multiple supervisors (BACB, 2015c) while still maintaining consistent oversight of clinical training by a full-time faculty member.

A few of the circumstances that may warrant the practicum instructor providing individual supervision include, but may not be limited to, site development, remediation of student performance, coverage for an absent supervisor, and periodic site/student checks. For example, to assist in the development of a new practicum site, the instructor may initially offer to assist the on-site supervisor with weekly individual supervision. They would then fade their assistance as the on-site supervisor became more independent with the supervisory requirements. Practicum instructors could also use individual supervision as a remediation tool for at-risk students. Students who are struggling at their practicum sites or having professional issues may require more oversight in the form of individual supervision from the practicum instructor. These meetings could replace or be done in conjunction with the student's assigned community supervisor until the conditions of a remediation plan are met. Inevitably, there will be times when community supervisors assigned to students will miss or cancel supervision appointments (e.g., illness, client emergencies). When this occurs, the practicum instructor could attempt to cover for the supervisor by offering individual supervision in their place. Using the practicum instructor as a contingency plan for individual supervision will help students avoid the potential loss of their accumulated experience hours during a supervisory period. Additionally, developing supportive relationships by occasionally covering supervision sessions for colleagues places the practicum instructor in a better position to request similar favors if they ever need coverage in the future due to illness, family emergency, or other unanticipated events. Finally, under this model, the practicum instructor could use individual supervision sessions to conduct periodic site visits with students. Periodic visits could be scheduled throughout the semester so the supervisor has regular contact

with all of the students at their sites. These visits could be prompted by the student or supervisor requesting additional assistance at their site.

Group supervision offers practicum instructors the opportunity to stay informed about student progress at their sites. For example, a program offering students the opportunity to accumulate hours within the BACB's intensive practicum experience category could require each student to attend an individual supervision meeting with their on-site community supervisor and attend a separate group supervision meeting overseen by the practicum instructor. Group supervision meetings are an excellent opportunity for students to practice their presentation and case conceptualization skills. It also offers students an opportunity to learn more about the work that their colleagues are conducting at sites that they may never have an opportunity to visit. Additionally, arranging for case presentations during group supervision creates opportunities for students to learn how to function as professionals by accepting and providing feedback from their peers and the instructor. Finally, from a logistical perspective, these meetings are also a good opportunity for the practicum instructor to make copies of practicum training records, assess student progress on their goals, and identify any potential professional issues.

When scheduling group supervision meetings, programs must be careful to operate within the confines of the BACB Experience Standards. For example, at the time of this writing, no more than ten supervisees were allowed to attend a single group supervision meeting and group supervision could not count for more than 50 % of the total supervision during a supervisory period (BACB, 2015c). One way to convert standard course meetings into multiple group supervision meetings under a traditional semester schedule is to split the weekly course meeting in two and assign half the class to each section. For example, a three-credit practicum course scheduled during a 15-week semester with 20 students enrolled could be converted into two weekly 1.5-h group supervision meetings with ten students each.

One additional area related to supervision involves incorporating a peer mentorship model within the practical training system. This model would involve having more senior and experienced students train and oversee the work of junior students. Peer mentorship allows senior students to hone their supervisory skills and junior students to receive feedback from multiple sources and potentially reduces the workload for the practicum instructor. However, peer mentorship should not be confused as supervision since senior students may not meet the qualifications to supervise as indicated by the BACB.

Administration Practicum instructors have a significant amount of administrative responsibilities that form a large portion of their workload. These responsibilities include, but are not necessarily limited to, staying current with all relevant experience and ethical standards (BACB, 2014, 2015b),

developing and maintaining diverse practical training sites and supervisors (BACB, 2015c), assigning students to appropriate placements, reviewing and keeping program and student records, and handling student and site grievances.

The Behavior Analyst Certification Board (BACB) has only been in existence since 1998 (Shook, 2005). However, during that time, the experience requirements for eligibility to sit for a certification examination have undergone significant changes (BACB, 2005, 2015c). The practicum instructor must remain vigilant in tracking these changes as their misinterpretation or misapplication of the standards could result in students being unable to count experience hours accumulated during practica toward the BACB's exam eligibility requirements. Similarly, practicum instructors have a responsibility to remain fluent and teach the field's ethical standards (Brodhead & Higbee, 2012). They are expected to model their own behavior in accordance with these standards and hold students and supervisors accountable when necessary.

It is recommended that a large portion of the practicum instructor's administrative time be dedicated to developing and maintaining practical training sites that span a diverse set of populations, settings, and service types (BACB, 2015c). Having a large pool of diverse sites allows the program to tailor their practical training to each students' individual needs and interests and allows for flexibility should unanticipated events occur (e.g., supervisor leaves site, site not adhering to agreement). It is also recommended that practicum instructors avoid promising students assignments at specific community training sites. In most cases, programs have little or no control over the administrative decisions made by community sites and contingencies outside the control of the practicum instructor may prevent them from following through with these promises.

It is recommended that practicum instructors become fluent in articulating the benefits of establishing and maintaining a relationship with a training program to attract and keep community sites and supervisors involved. Fortunately, there are several very good reasons for community sites and supervisors to value their relationship with a training program. First, by offering practical training opportunities to students, community sites are able to identify potential future employees and vet their skill sets before offering a position with the company. Second, a community site can advertise their involvement with the training program within their marketing materials. This may help the community site attract more business and publicly demonstrates the site's participation in the training of the next generation of professionals. Additionally, practicum instructors can request that their institution's web team add the site name and link to the program's website as a "community partner." This form of free advertising shows the community site that the training program takes the relationship with the site seriously. Third, community sites are given access to students who are able to offset some of the workload

from employees. Practicum instructors can supplement this assistance further by assigning students to work on specific projects that the community site is interested in addressing. Fourth, partnering with training programs helps hold supervisors working in community sites accountable. Specifically, supervisors may be more likely to deliver higher-quality services when they are aware that their supervisee, their supervisee's peers, and the practicum instructor will have access to their work. Additionally, when supervisees are assigned across sites and supervisors, it may help set the occasion for better service delivery from supervisors interested in preserving their professional reputations in the community. Fifth, community sites and supervisors may be given access to various resources from the training program in the form of additional supervision, training, and oversight. For example, a supervisor may receive valuable feedback when their supervisee practices presenting their client's case during group supervision, or a supervisee may be able to help identify articles of interest to supervisors related to client programming. Additionally, practicum instructors can also offer sites free training to help their BCBAs meet the BACB supervisor requirements (BACB, 2012).

For programs interested in offering diverse practical training opportunities in the community, practicum instructors should actively maintain the relationships that they have with community sites and supervisors. To keep this relationship mutually beneficial, students should be prepared when they arrive on site and meet with their supervisor(s). One way to meet this objective is to align sites with semesters based on what the students should know and what the sites need. While it is impossible to avoid all student issues, program policies can be written, adopted, and consistently enforced to help minimize the issues (e.g., attendance policy, professionalism policy). Furthermore, the environment can be arranged so practicum instructors are able to catch any professional issues early and address them quickly (e.g., weekly check-ins during group supervision). To encourage open communication, the practicum instructor can provide supervisors with an honest assessment of students' strengths and weaknesses prior to making assignments. As the students progress through the program, this responsibility could be turned over to them to in order to ensure that they are able to self-detect personal and professional limitations. If multiple supervisees are to be assigned to a single supervisor, it is recommended that practicum instructors counterbalance weaker students with stronger students to avoid supervisor burnout. It is recommended that practicum instructors arrange for sites and supervisors to be acknowledged for their contributions. This may involve prompting students to write personalized thank-you notes to supervisors at the end of each semester, sending positive feedback to supervisor's superiors, hosting an end-of-the semester luncheon, or publicly acknowledging the site and supervisor involvement during a commencement or hooding ceremony.

Developing new practical training sites may initially require contacting human service agencies that employ behavior analysts that could potentially serve as supervisors for the program. Another potential resource for finding these supervisors is the BACB Certificant Registry (BACB, 2016a). The registry can be used to identify BCBA supervisors living in a designated area. An email or internet search for these names can be conducted to provide practicum instructors with a list of organizations employing these BCBAs. Before establishing an official relationship, practicum instructors may want to consider meeting with their institution's legal representatives and request guidance developing the language to be included in a memorandum of understanding (MoU) or contracts required between the program and a practical training site. Additionally, it is recommended that practicum instructors visit the organization and meet with all potential supervisors to verify its appropriateness and viability as a practical training site before establishing any official relationship. These visits can be used by the practicum instructor to evaluate where the site would fit within the training curriculum and to discuss the expectations and value of establishing a relationship with the program. Generally, it is recommended that new practical training sites are approached cautiously and not overloaded with students until a trusting relationship between site administrators and supervisors is established. One strategy to help establish value and trust between the site and the program is to assign only one or two top performing students to the site initially. Top performing students will likely function as good program representatives and will be in a better position to help the practicum instructor evaluate the quality of the site.

Maintaining an established practical training site requires a significant amount of administrative time. Practicum instructors must ensure that any contracts or MoUs between the program and site are current, that updated curriculum vitas for every supervisor are on file, and that supervisors overseeing the work of students continue to meet all BACB supervision requirements (BACB, 2012). Additionally, the program is responsible for notifying the BACB of any significant changes to their practical training system. This includes, but is not necessarily limited to, updates to practicum syllabi, attestation forms and curriculum vitas for all practicum site supervisors, and an updated list of practicum sites and supervisors. As part of their administrative responsibilities, it is recommended that the practicum instructor be charged with keeping these records organized and sharing updates with the program's designated ACS coordinator. To ensure that these activities take place, practicum instructors could schedule regular review of their files at the start of every semester prior to making student assignments.

Practicum instructors or another program designee should keep copies of all supervision documentation for a minimum of 7 years. These records should include all copies of every site MOU, every supervisors CV and attestation form,

supervisee/supervisor contracts, student supervision forms, and experience verification forms. These records may be necessary if a student or the program is ever audited by the BACB. It is recommended that practicum instructors create a set schedule for collecting documentation from students. These files can be organized and kept in a locked file cabinet for safekeeping and for auditing purposes. Original documents should be turned back over to the student for their own records. An ideal time to perform this function is the start of weekly group supervision sessions. Additionally, it is recommended that practicum instructors consider creating a spreadsheet that allows students to track their experience and supervision hours against the program's weekly expectations. Doing so will help provide the student and practicum instructor with a clearer picture of the student's progress and their overall compliance with the BACB's experience standards.

Another important administrative function of a practicum instructor is handling student and site grievances. Practicum instructors should be prepared to address student grievances about practicum sites or supervisors as well as practicum site and supervisor grievances about students. Practicum instructors may need to quickly reassign students if a site violates any terms of the MoU or supervision contract, such as a supervisor repeatedly canceling scheduled supervision meetings, neglecting to observe students working with clients, or requiring students to work in an unsafe work environment. Practicum instructors may also need to create remediation or disciplinary plans to address student issues, for example, if a student continually shows up late to sessions, is caught falsifying data, or is rude to their supervisors, clients, or staff. It is recommended that the practicum instructor is given the administrative time to develop close relationships with the students, supervisors, and site administrators so these issues are brought to their attention and

addressed immediately. Policies for addressing grievances can be outlined within the program's practical training handbook and reviewed periodically with all parties.

Finally, serving as a practicum instructor requires a strong interpersonal repertoire in addition to being an effective teacher, supervisor, and administrator. Practicum instructors must be able to form new relationships with identified sites, maintain multiple relationships with potentially competing sites offering similar services, and address grievances immediately and satisfactorily and be able to cosupervise without overshadowing or contradicting feedback from colleagues supervising in the field. It is recommended that evidence of these interpersonal skills is present before a program hires a practicum instructor. Moreover, programs interested in developing an effective practical training system must be prepared to provide the time and resources necessary for their practicum instructor to effectively carry out these responsibilities.

Case Study

The aforementioned guidelines informed the creation of an updated practical training system at a small private US university located in the Midwest from August 2013 to December 2015. The practical training system was housed within the university's 43-credit, four-semester, non-thesis M.S. in Applied Behavior Analysis Program. The program contained a BACB ACS and had received approval from the BACB to offer its students the opportunity to accumulate their experience hours toward certification under the BACB's practicum and intensive practicum experience categories.

The program utilized a cohort model and admitted no more than 20 students each fall. Students were exposed to a prescribed schedule of courses that contained two didactic and

Fig. 1 Total number of experience hours accumulated by two cohorts of students across four consecutive semesters. The horizontal dashed line represents the 750 minimum number of experience hours that individuals are required to accumulate under the BACB's intensive practicum experience category to qualify to sit for the BCBA certification examination

Fig. 2 Total number of supervised hours accumulated by two cohorts of students across four consecutive semesters. The horizontal dashed line represents the 75 minimum number of supervised hours that individuals are required to accumulate under the BACB's intensive practicum experience category to qualify to sit for the BCBA certification examination

one practicum courses each semester. In their final semester, students were required to enroll in an additional comprehensive examination course. Didactic coursework in the program was taught by one full-time doctoral-level faculty member and one part-time doctoral-level faculty member with a dual appointment in the university's psychology department. Practica was taught and overseen by a full-time masters-level practicum director. Two cohorts of students ($n = 17$, $n = 14$) were exposed to the practical training system across four consecutive semesters.

The practical training system utilized within the program included all of the recommendations given with the exception of the portfolio assignment. For example, the university hired a full-time practicum director to teach, supervise, and administer all aspects of the practical training system and worked closely with community sites to provide students with the opportunity to accumulate hours across a variety of settings and supervisors. Within this system, students were expected to accumulate 13–15 experience hours each week during the four

consecutive 15-week semesters. Additionally, students were expected to receive a minimum of 45 min of individual supervision from their community supervisor, tasked with observing them with a client each week, and an additional 45 min of group supervision from the practicum director. This arrangement allowed students to meet twice a week and receive supervision for no less than 10 % of the total experience hours accumulated during the supervisory period as required under the BACB's intensive experience category (BACB, 2015c). It should be noted that during group supervision, the practicum director met with groups of ten students or less for 1.5 h each week. However, only 45 min of the group supervision time was allocated toward each student's BACB supervision hours to remain in compliance with the BACB's experience standard requiring group supervision to remain under 50 % of the total supervision time during a supervisory period (i.e., 45 min of individual supervision and 45 min of group supervision). Under this schedule, students were given the opportunity to accumulate between 780 and 900 experience hours and 90

Fig. 3 Total number of practical training sites that two cohorts of students were assigned to across four consecutive semesters

Fig. 4 Total number of supervisors that two cohorts of students were assigned to across four consecutive semesters

supervision hours under the BACB's intensive practicum experience category before they graduated from the program. Modifications to the schedule were made on an as-needed basis, and students were expected to track, self-monitor, and report on their overall performance to the practicum director at least once a semester.

Figures 1 and 2 depict the total number of experience and supervision hours accumulated by both cohorts of students across their respective four consecutive semesters enrolled in the program. The data show that every student was able to meet the BACB's experience requirements prior to graduating from the program. Variability in the total number of experience hours across students can be accounted for by examining factors outside the program's control (e.g., sick days, bad weather days, supervisee/supervisor choice of increasing experience and supervision hours, and changes of placement mid-semester across four semesters). Variability in supervised hours occurred due to the unique supervision arrangements at each practicum site (i.e., some supervisors were able to provide more than the minimum supervision) and due to the extra supervision provided when students failed to show progress. Additionally, the practicum director would often provide extra supervision to students to ensure that he or she was able to provide appropriate feedback on indirect work and during group supervision.

Figures 3 and 4 depict the total number of practical training sites that students in both cohorts were exposed to across four consecutive semesters. These data indicate that every student accumulated experience at four or five separate practical training sites and had at least five different supervisors across sites. On rare occasions, students were reassigned to the same site when the practicum director had reason to believe that their training at that site was not complete or there were enough new activities and supervisors for them to contact in another semester. Each semester student was assigned one primary individual supervisor from the community. However, sites

with several qualified supervisors would occasionally assign the supervisee to work under the advisement of a supervisor with expertise on a project and then switch to another specialized supervisor when another assignment was made.

In February 2015, 16 of 17 students (94 %) from the first cohort sat for their certification examinations 2 months after graduating from the program. One student chose not to sit for their exam for reported financial reasons. This cohort had a first-time pass rate of 81 % (13 of 16). In February 2016, 12 of 14 students (86 %) from the second cohort sat for their certification examinations 2 months after graduating from the program. One student chose not to sit for their exam for financial reasons and the other student just had a baby. This cohort had a first-time pass rate of 92 % (11 of 12). While these data are not experimental, they do demonstrate the viability and results of a practical training system informed by the recommendations described earlier.

Conclusion

Higher education training programs interested in producing behavior analytic scientist practitioners should consider including practica as an integral part of their curriculum. Both professional and financial opportunities may be missed by programs that do not offer practical training to their students. The considerations and recommendations described earlier are meant to be used by program administrators to assist in the careful planning and organization of a practical training system designed to meet the BACB experience standards (BACB, 2015c). These recommendations are not universal and should be adapted to each program's unique context. Additionally, program administrators should review the BACB's experience standards prior to implementation to ensure that the recommendations included are not obsolete.

Compliance with Ethical Standards

Conflict of Interest The first author is the Accreditation Administrator for the Behavior Analysis Accreditation Board of the Association for Behavior Analysis International (BAAB). The following article represents the views of the authors and not necessarily those of the BAAB. The second author declares that she has no conflict of interest.

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