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Implementing Evidence-based Practice in Social Work Education:

Principles, strategies, and partnerships

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Abstract

Implementing EBP requires distinct and deliberate interventions for attaining each of the outcomes listed above. This paper suggests a variety of strategies that derive from core components of school and agency activity and that can be used purposively to advance student learning of evidence-based practice. Interventions or strategies to advance EBP should meet five criteria: they must be deliberate and strategic, they should be knowledge-based, they should reflect the complexity of social work practice, they should capitalize on school resources and core activities, and they should build upon natural partnerships inherent in professional education. Their savvy and ingenuity in leveraging existing resources may be the key to schools' success in training students for evidence-based social work practice.

Evidence-based practice has gained considerable momentum in social work, momentum reflected in part by this conference. An increasing number of schools of social work have endorsed EBP. Many social work agencies have come to embrace EBP and turn to social work faculty to help identify practices that have a strong evidence base. The literature on EBP is flourishing, both within and beyond social work: an increasing number of articles report on the effectiveness of social work interventions and synthesize the evidence.

Social work may have reached a critical point with respect to EBP. For years, the profession has wrestled with limitations of our insufficient research infrastructures and productivity. We continue to debate varying standards and the sufficiency of evidence. But the tide of expectations has risen: social work faculty expect to and do produce evidence; the current generation of students expect a social work education that is based on evidence; and agencies seek our help in putting evidence to the service of their clients. With an increasingly adequate “supply” of effective interventions, the present challenge is one of implementation. How do we help students and agencies put evidence-based practice into practice? And how do we do so effectively, that is, guided by theory and evidence? Schools of social work now have opportunity to advance EBP with energy, innovation, and vision.

This paper advances the thesis that advancing evidence-based practice in social work education requires strategy and partnerships. It builds on a prior paper that provides a conceptual framework for the multiple stages, tasks, and participants required for the implementation of EBP. That paper also addressed the infrastructure needs of social work research, social work education, and social service agencies in order to advance evidence-based practice (Proctor,

2004). Now, and with a focus on social work education, this paper addresses the principles, partnerships, and strategies for attaining those outcomes.

Operating definition of evidence-based practice. This paper is based on a definition of evidence-based practice as: (1) the use of practice methods that have the strongest base of evidence to support their effectiveness; (2) engaging in practice as rationally as possible, drawing on evidence from research to support each decision through critical thinking and decision making according to specified criteria. While the former definition emphasizes products (practices deemed to have a base of evidence), the latter definition emphasizes decision making processes of the service provider. Thus EBP is both a “noun” and a “verb.” Whether at the direct service, management, community, or policy level, practicing on the basis of evidence requires that practitioners identify practice problems, questions or issues that can be informed by research; identify the best available evidence relevant to those issues; critically evaluate the goodness, generalizability, and currency of the evidence; implement the best available evidence-based practices in conjunction with professional judgment and in concert with the wishes, values, and needs of the client or client system; and evaluate the implementation and effects of the evidence-based practice.

Intermediate outcomes in the implementation of EBP. Implementing evidence-based practice requires attaining four component, or intermediate outcomes: evidence must be accessed and potential evidence based practices need to be identified; the utility and advantages of evidence-based practices must be accepted, and processes of critical thinking about evidence must be adopted; practices deemed most effective and appropriate need to be implemented with fidelity; and the effectiveness of the (evidence-based) practices must be evaluated, as applied in the situation at hand (Proctor, 2004).

Principles, strategies, and partnerships for advancing EBP

Implementing EBP requires distinct and deliberate interventions for attaining each of the outcomes listed above. This paper suggests a variety of strategies that derive from core components of school and agency activity and that can be used purposively to advance student learning of evidence-based practice. Interventions or strategies to advance EBP should meet five criteria: they must be deliberate and strategic, they should be knowledge-based, they should reflect the complexity of social work practice, they should capitalize on school resources and core activities, and they should build upon natural partnerships inherent in professional education.

Deliberate and strategic action

Evidence-based practice will not be advanced by mere admonition. Nor will it be helped much by the “blame game” social work has indulged, bemoaning the insufficiencies of empirical evidence in our knowledge base; accusing researchers of ignoring the real needs of practice in their choice of study topics; and blaming social work practitioners for not reading the literature or staying stuck in their “ruts” of familiar and favorite intervention methods. Instead advancing EBP requires action to not just disseminate but action to implement. As we work to advance evidence-based practice, we must practice what we preach by actually “practicing”—by deliberately and strategically intervening. A recent grant Program Announcement) from the National Institutes on Health distinguishes between dissemination and implementation. It defines dissemination as “the targeted distribution of information and intervention materials to a specific public health or clinical practice audience” with “the intent to spread knowledge” of

associated evidence-based interventions. Implementation, on the other hand, is defined as the use of strategies to introduce or change evidence-based interventions within specific settings.

Social work research is commonly understood to be a knowledge-development activity. Social work education is probably viewed by most as a teaching, or knowledge dissemination, activity. But given our mission to train professionals as effective change agents, and drawing on the distinction provided above between dissemination and implementation, it is more appropriate to view social work education as a knowledge implementation enterprise. Such a perspective requires that schools of social work effectively employ specific implementation strategies. The research literature on changing professional behavior and on implementing new practices is clear about the limitations of passive knowledge dissemination strategies, such as lectures and written material. Ironically, these are among the most widely used approaches in social work education. Instead that literature indicates that multi-component, engaging, and active strategies are required to change professional behavior (Grimshaw, Shirran, Thomas, Mowatt, Fraser, Bero et al., 2001).

Knowledge based strategies

A small but growing body of literature can guide the implementation of EBP, and it is imperative that social work's efforts to advance evidence based practice draw on this knowledge. Implementation literature yields some heuristic models to guide dissemination. Several areas of theory, notably theory on the diffusion of innovation (Rogers, 1995), yield leverage points for the implementation of EBP's (Proctor, 2004). A rapidly growing body of qualitative research highlights barriers to the implementation of EBP and reports emanate from the fields of substance abuse, mental health, and medicine about practical implementation strategies. The

emergent status of this literature notwithstanding, it seems self-evident that we can ill afford to take anything other than an evidence-based approach to evidence-based practice implementation. Using this literature requires some effort, as it stems from multiple different disciplines, disciplines such as social marketing, health services, and quality improvement that may not be widely read by social work educators. Unfortunately, this literature has scant social work contribution or visibility. Because implementation challenges are front and center to social work education, research and practice, our field is uniquely positioned apply and contribute to the knowledge base on implementation of evidence based practices in real world settings. But whether we contribute to this literature or merely consume it, we must employ the strategies it yields so that we can take an evidence-based approach to advancing evidence-based social work practice.

Strategies consistent with the complexity of practice contexts.

Most of the literature about implementing evidence based practice, particularly in social work, emphasizes the “individual” level, particularly student, faculty, and provider receptivity to and acceptance of EBP. But a growing body of work from services research emphasizes that practice is influenced by factors at a variety of levels, notably the individual client and provider, agency teams, the organizational setting, and the larger environment that impinges on service delivery (Hermann, Chan, Zazzali, & Lerner, 2006). Shortell’s multi-level model reflected in Figure 1 emphasizes four levels in the organization of care. While Shortell’s work originates in

[Figure 1 about here]

health services research, each of these levels is operative and influential in social service agencies. Glisson’s work on mental health and child welfare organizations underscores the

importance of organizational climate and culture (Glisson & James, 2002). Advancing evidence-based practice in social work demands strategic action at multiple levels.

Social work education should not limit its focus to acceptance of EBP at the individual level, whether that individual unit of attention is the classroom educator, the student, or the field supervisor. Teams, particularly the provider-supervisor team, are particularly influential on the acceptance and use of new interventions given social work's traditional reliance on clinical supervision (Mullen, 2003; Corrigan et al., 2001; Proctor, 2004). The last column in Figure 1 identifies system, organizational, team and individual levels of change important for evidence-based practice in social work.

Leveraging school resources and core activities

Schools of social work can best advance evidence-based practice by bringing to bear a convergence of all their relevant resources. Figure 2 depicts four areas in which schools are heavily invested: their curricula, research, affiliated agencies, and information infrastructure.

[Figure 2 about here]

Their savvy and ingenuity in leveraging existing activities and resources may be the key to schools' success in training students for evidence-based practice.

Curriculum. Recent federal reports emphasize a shortage of professionals who are trained to deliver evidence-based services (HHS, 1999; NIMH "Road Ahead Report, 2006). This difficulty stems, in part, from the historic low penetration of research findings into the real world of service delivery. But it further signals inadequate professional training, including social work education. The Road Ahead report (NIMH, 2006) asserts that "currently, too few mental health graduate training programs devote adequate time to education on evidence-based methods of

diagnosis, treatment, or evaluation” (page 17). Because most providers site graduate school as the source of their initial training in evidence based practice (Walrath, Sheehan, Holden, Hernandez, & Blau, 2006), schools of social work most likely share culpability for the nation’s insufficient supply of EBP-trained practitioners.

Every school invests heavily in shaping and building its curriculum, and classroom teaching consumes a large portion—perhaps the lion’s share-- of faculty members’ time and energy. Paraphrasing the social work adage, “start where the client is,” social work education should “start where students and faculty are—in the classroom” to advance evidence-based practice. The curriculum should serve as the cornerstone for students’ education for evidence-based practice (Howard, McMillen, & Pollio, 2003). Course syllabi should provide current evidence from rigorous studies on treatment effectiveness. Practice courses should focus explicitly on helping students access information about interventions. In order to engage in informed, critical thinking about solutions to social work problems, students need to be able to weigh the relative advantages of different intervention practices. Lectures, exercises, and class discussions can foster the skills needed to access evidence, critically assess its qualities and appropriateness, and engage in the critical, logical, probabilistic thinking required for applying evidence to real-world problems of professional practice. Teaching students to actually implement evidence-based practices with fidelity is particularly challenging and will likely require particular resources, including intervention manuals and training manuals, fidelity measures, and outcomes measures that are specific to the particular practice being taught. It also requires drawing on evidence-based approaches to teaching evidence-based practice (Stuart, Tondora, & Hoge, 2004). And curricula must ensure that students learn methods to evaluate the effectiveness of treatments, programs, and services.

Research. Research is another critical resource for advancing evidence based practice: research published in journals and new research being conducted by a school's faculty members. Faculty members should use their research-derived knowledge to identify effective practices and to derive the implications of evidence for agencies and students. Both the research conducted at a given school and that accessible through its library resources should be useful to the challenges of implementing and shaping evidence-based policies and practice in agencies and communities.

Our school's orientation for MSW students each semester includes a session on the importance of research to professional practice overviews a range of current faculty research projects. We believe that evidence based practice is advanced when faculty members articulate their commitment to research, when they engage students in their research activities, and when they make research findings transparent and accessible to students. Our school engages over 200 students each year in faculty research projects; their involvement complements our commitment to teaching from an evidence base in the classroom. Faculty research would seem to be "low hanging fruit" that can be easily leveraged to inform evidence-based class-room teaching

Agencies. Agencies that serve as sites for field education should be committed to applying evidence in practice and to participating in the knowledge building enterprise. Indeed the field practicum should be conceptualized as a laboratory for implementing and evaluating evidence-based practices. Schools should strategically use field placements to enhance the quality of field education for MSW students, advance the School's research agenda, enhance agency infrastructure, and improve the quality of agency services.

Our school finds that most of our field placement sites are receptive to evidence-based practice, and several have made impressive strides at adopting and implementing EBP. Yet many agencies lack the time and resources to access research and have limited capacity to train

providers in new treatment approaches. Agencies vary in their receptivity to EBP as a function of their capacity to implement new practices, their organizational climate and culture (Glisson and James, 2002), their resources and competing demands, their histories with innovation and their readiness to change (Lehman, Greener, & Simpson, 2002), and their leadership's commitment to EBP. Agency theory would suggest that capacity for and investment in EBP requires some catalyst for improving service quality through evidence-based practice. Who can, should, and will champion EBP within agencies? Certainly the agency's relationship with a school of social work can be an invaluable catalyst.

School-wide resources and infrastructure: Further resources for advancing evidence-based practice reside within every school's infrastructure. School library holdings and electronic data bases can make evidence more accessible to both students and field instructors. Sessions on how to systematically search and find evidence relevant to selected practice and research problems should be targeted to different groups of stakeholders. The ability to pursue answers to practice-relevant questions is a key skill that students will need throughout their professional lives. Schools are uniquely positioned with time, hardware, technology support, and expertise in searching evidence. However, searching for and comparing alternative interventions may be feasible in agencies, given pressing limitations in their electronic and library infrastructures and the cost they incur in non-billable hours.

A school's programs of guest speakers, lecture series, visiting scholars, and continuing education opportunities can also be leveraged to help make empirical evidence more available and accessible. Our annual school-wide lecture series is shaped to complement our curriculum structure. We invite national experts to speak about current evidence in the topics reflected in our

concentrations. Disseminating lecturers' publications in advance can stimulate greater awareness, knowledge, and scholarly exchange.

Advancing EBP through strategic partnerships

Knowledge has traditionally developed “bench to trench,” with the academic setting serving as the “bench” where hypotheses and research questions are formulated, rooted ideally in theory and prior published research. Practice or policy has been the “trench,” to which knowledge dissemination has been directed in the last steps (if at all) of the knowledge development process. The sufficiency of this approach for implementing evidence based social work practices is challenged by persistent evidence of very little “uptake” of research findings in either social work education or practice. The literature is convincing about the limited effectiveness of unidirectional, linear models of EBP dissemination (Addis, 2002), particularly given stakeholders' reservations about EBP (Essock et al., 2003).

Advancing evidence based practice in social work requires a fundamentally different approach. “Bench to trench” will not suffice; rather we need to partner “trench-to-bench and back to trench” (Proctor, 2003). School-agency partnerships need to be cultivated, respected, nurtured, and deliberately used to advance EBP. Social work has long recognized the importance of strong ties to agencies (Schilling, Schinke, Kirkham, Meltzer, & Norelius, 1988). But in spite of the emergence of a fairly robust literature about academic-practice partnerships, there is little evidence that social work schools have taken strategic advantage of such ties to advance evidence-based practice.

A number of recent federal reports and policies call for greater emphasis on partnerships between various groups of stakeholders who share a commitment to improving service through

science. One of the most recent of such reports, the National Institute of Mental Health's "The Road Ahead, calls for truly collaborative and sustainable partnerships among diverse stakeholders. The partnership literatures, including those on Public-Academic Liaisons and Community Based Participatory Research (CBPR), yield such helpful principles as co-learning, mutual transfer of ideas, reciprocal respect and trust, shared decision making, and mutual ownership (Arcury, 2000; Israel, Schultz et al., 1998; Israel, 2000). The quality improvement literature also can inform the development of school-agency partnerships. That literature stresses that practice knowledge must fully reflect the complexity and nuances of the practice context (Miller, McDaniel, Crabtree, & Stange, 2001). Local circumstances determine the acceptability, applicability, and usefulness of interventions. Incorporating these perspectives into empirical knowledge requires partnerships between knowledge developers (researchers) and the real world of service delivery. Collaboration and strategic partnerships seem essential to disseminating and implementing evidence based practice (Gonzales et al., 2002).

It seems apparent and imperative that schools of social work leverage their relationships with social service agencies, particularly those engaged in field education, to advance EBP. Such partnerships should be guided by explicit principles and should be strategically formed and pursued to advance mutual objectives. Specifically, partnerships should be formed and evaluated on the basis of their ability to enhance the quality of field education for MSW students, advance the school's research agenda, enhance agency infrastructure, and improve the quality of agency services. They should serve a "win, win, win" function for education, research, and agency practice.

The arrows in Figure 2 between a school's curriculum, its research, and its affiliated agencies reflect some of the partnerships with potential to advance EBP. Schools and agencies

should marshal their individual and collective resources to help students access, adopt, implement, and evaluate evidence-based practices. As reflected in Figure 3, schools and

[Figure 3 about here]

agencies must each bring resources to the identification, acceptance, implementation, and evaluation of evidence-based practices. For each of these critical outcomes, each partner must engage the capacities of their key stakeholders, be they full time faculty, adjunct faculty, field instructor, agency leaders in practicum sites, supervisors, and students. And the strategies employed in pursuit of these outcomes must address practice at multiple levels, consistent with points reflected in Figure 1.

Curriculum-research partnerships. Schools should work to ensure that teaching and research are complementary and mutually beneficial activities. At the level of the individual, faculty members should teach in areas of their research expertise; at the school level, curriculum structure and emphases should reflect areas of research strength. Our school has strong research centers in the areas of asset development, addictions, and mental health services. We try to ensure that our curriculum benefits from faculty members' knowledge of effective practices in these areas, expertise that stems largely from their active engagement in research. Faculty bring their knowledge of effective practices to their roles in the classroom, to curriculum oversight committees, and to their roles as "lead teachers" for concentrations and courses with multiple sections. National experts visiting our school to consult on research projects are typically asked to give lectures, to which students and faculty (including adjuncts) in relevant courses receive special invitations. Informal lunches or discussions provide opportunity for faculty teaching in the area to meet with the expert. Strategic linkages such as these enable us to leverage our research activities for the benefit of our students' MSW education.

Curriculum-agency partnerships. Given the centrality of the field practicum in social work education, schools of social work are optimally positioned to partner with social service agencies to advance evidence-based social work practice. Schools need strong relationships with agencies that correspond to and complement areas of curricular emphasis. Each curriculum concentration and specialization should have structured partnerships with agencies that serve as laboratories for students to integrate their classroom and field learning.

Social work has a long tradition of working to integrate class and field education. However these efforts have focused disproportionately on the individual level (Figure 1, above), such as individual student's ability to apply classroom learning to field. Social work education would benefit from more structural, strategic partnerships focused on and providing support to team, organizational, and environmental issues. These efforts should go beyond the structural school-agency contracts to address substantive practice concerns. The quality improvement, innovation diffusion, and EBP implementation literatures underscore the impact of agency infrastructure on a student's ability to apply the principles and content of evidence-based practices in their field work. Those literatures suggest that EBP implementation will be more successful in agencies where leadership, clinical supervisors or managers, and front-line providers are receptive to using EBP's. As we contract with agencies for field placement, schools should consider such questions as: Do agencies have time to supervise students in using particular treatments or programs that are taught in our classes? Is the agency climate open to new and innovative practices, or are students encouraged to stick with agency traditional practices? Does the field instructor have time to learn and supervise the student in the challenge of crucially assessing the differential effectiveness and clinical appropriateness of alternative practices? Is the agency supportive of protocolized, or manualized, treatments and programs,

tools to measure treatment fidelity, and program or treatment outcomes? Are resources available to support quality training, fidelity monitoring, and process and outcome recording?

Schools should work to ensure that their faculty, including adjuncts, their field instructors, doctoral students, and MSW students are knowledgeable and comfortable consumers of systematic reviews of evidence such as the Campbell Collaboration reviews. Schools should strategically and purposively build partnerships across arenas of institutional activity for the purpose of advancing evidence-based practice. Partnerships should help build agency capacity through training and technical assistance. Faculty members and agency leadership should work together to identify interventions that have a strong base of research support and are relevant to an agency's mission. Agency receptivity heightened when EBP's are targeted to their pressing service delivery challenges.

Our school obtains this input through the participation of agency providers and directors who serve on curriculum advisory committees, including sub-committees for each concentration and specialization, and the Dean's Professional Advisory Committee. Agency-relevant interventions with demonstrated effectiveness should then be taught in the classroom and their implementation supported in field education sites with full agency endorsement, commitment, and support.

Research-agency partnerships. Research-agency connections can bring the best available evidence from research to bear on practice questions important to the agencies, thereby improving the quality of agency services, enhancing student learning in the agency, and further grounding faculty research in the service delivery. Most schools of social work have yet to fully ensure that the benefits of research are leveraged for the benefit of social service agencies or that agency concerns are reflected and benefited by research.

In a recent new initiative, our School's Center for Mental Health Services Research has institutionalized formal relationships with agencies through a Research Network Development Core. Its explicit purpose is incubating research ideas. We work to (a) identify areas in which agencies are themselves striving to develop knowledge about effective practice from their outcome data; (b) inform researchers about current trends and issues in the practice setting, and (c) enable these developments in the field to influence faculty members' research agendas. Research-agency interaction helps agency staff learn about potential EBP's relevant to their missions and priorities, helps faculty target their research toward agency priorities, and helps agency-researcher teams formulate relevant and innovative plans for new intervention and implementation research.

Agencies provide the perfect and essential testing grounds for the ultimate challenge in evidence-based practice: fitting evidence from efficacy or effectiveness research to particular practice settings that likely differ from those where the intervention was developed and tested. Research on the implementation of evidence based practices will require multi-level research designs and the measurement of a new set of outcomes, for implementation outcomes that are distinct from service or clinical outcomes. Implementation outcomes include the penetration of the EBP, its acceptability to key stakeholders, and its sustainability over time.

Conclusion

Given the breadth of social work as a profession, the breadth of most school curricula, and the array of agencies for potential field practicum with a school, EBP can probably only be rolled out incrementally, starting perhaps with a small and select group of agencies. Ultimately, however, each school should aim to establish structured partnerships with agencies that serve as laboratories for training and research in each area of the school's curriculum. School-agency

partnerships should be constructed and evaluated for their capacity to enhance the quality of field education for MSW students, advance the School's research agenda, enhance agency infrastructure, and improve the quality of agency services. A "win, win, win" perspective should drive these partnerships.

References

- Addis, M.E. (2002). Methods for disseminating research products and increasing evidence-based practice: Promises, obstacles, and future directions. *Clinical Psychology-Science and Practice, 9*(4), 367-378.
- Arcury, T. (2000). Successful process in community-based participatory research. In L.R. O'Fallon, F.L. Tyson, & A. Dearry (Eds.), *Successful models of community-based participatory research* (pp. 42-48). Washington D.C. National Institute of Environmental Health Sciences.
- Corrigan, P.W., Steiner, L., McCracken, S.G., Blaser, B., & Barr, M. (2001). Strategies for disseminating evidence-based practices to staff who treat people with serious mental illness. *Psychiatric Services, 52*, 1598-1606.
- U.S. Department of Health and Human Services. (1999). *Mental health: A report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health.
- U.S. Department of Health and Human Services. (2006). *The road ahead: Research partnerships to transform services. A report by the National Advisory Mental Health Council's Workgroup on Services and Clinical Epidemiology Research*. National Institutes of Health, National Institute of Mental Health.
- Essock, S.M., Goldman, H.H., Van Tosh, L., Anthony, W.A., Appell, C.R., Bond, G.R., et al. (2003). Evidence-based practices: Setting the context and responding to concerns. *Psychiatric Clinics of North America, 26*, 919-938.

- Glisson, C., & James, L.R. (2002). The cross-level effects of culture and climate in human service teams. *Journal of Organizational Behavior, 23*, 767-794.
- Gonzales, J.J., Ringeisen, H.L., & Chambers, D.A. (2002). The tangled and thorny path of science to practice: Tensions in interpreting and applying “evidence”. *Clinical Psychology-Science and Practice, 9*(2), 204-209.
- Grimshaw, J.M., Shirran, L., Thomas, R., Mowatt, G., Fraser, C., Bero, L., et al. (2001). Changing provider behavior: An overview of systematic reviews of interventions. *Medical Care 39*(8, Suppl. 2), 2-45.
- Hermann, R.C., Chan, J.A., Zazzali, J.L, & Lerner, D. (2006). Aligning measurement-based quality improvement with implementation of evidence-based practices. Administration and Policy in Mental Health and Mental Health Services Research. Retrieved June 15, 2006, from <http://www.springerlink.com/content/k8q67j704v185370/>
- Howard, M.O., McMillen, C.J., & Pollio, D.E. (2003). Teaching evidence-based practice toward a new paradigm for social work education. *Research on Social Work Practice, 13*(2), 234-259.
- Israel, B., Schulz, A.J., Parker, E.A., & Becker, A.B. (1998). Review of community-based research: Assessing partnership approaches to improve public health. *Annual Review of Public Health, 19*, 173-202.
- Israel, B.A. (2000). Community-based participator research: Principles, rationale and policy recommendations. In L.R. O’Fallon, F.L. Tyson, & A. Dearry (Eds.), *Successful models of community-based participatory research* (pp. 16-29). Washington D.C.: National Institute of Environmental Health Sciences.

- Lehman, W. E. K., Greener, J. M., & Simpson, D. D. (2002). Assessing organizational readiness for change. *Journal of Substance Abuse Treatment, 22*, 197-209.
- Miller, W.L., McDaniel, R.R., Crabtree, B.F., & Stange, K.C. (2001). Practice jazz: Understanding variation in family practices using complexity science. *The Journal of Family Practice, 50*(10), 872-878.
- Mullen, E.J. & Bacon, W.F. (2003). Practitioner adoption and implementation of practice guidelines and issues of quality control. In A. Rosen & E. K. Proctor (Eds.), *Developing practice guidelines for social work intervention: Issues, methods, and research agenda* (pp. 223-235). New York. Columbia University Press.
- Proctor, E.K. (2003). *Developing knowledge for practice: Working through “trench-bench” partnerships. Social Work Research, 27*(2), 67-69.
- Proctor, E.K. (2004). Leverage points for the implementation of evidence-based practice. *Brief Treatment and Crisis Intervention, 4*(3), 227-242.
- Rogers, E.M. (1995). *Diffusion of Innovations* (4th ed.). New York: Free Press, 1995.
- Schilling, R.F., Schinke, S.P., Kirkham, M.A., Meltzer, N.J., & Norelius, K.L. (1988). Social work research in social service agencies: Issues and guidelines. *Journal of Social Service Research, 11*(4), 75-87.
- Stuart, G.W., Tondora, J., & Hoge, M. (2004). Evidence-based teaching practice: Implications for behavioral health. *Administration and Policy in Mental Health, 32*(2), 107-130.
- Shortell, S.M. (2004). Increasing value: A research agenda for addressing the managerial and organizational challenges facing health care delivery in the United States. *Medical Care Research and Review, 61*(3), (Supplement to September, 2004) 12S-30S.

Walrath, C.M., Sheehan, A.K., Holden, E.W., Hernandez, M., & Blau, G.M. (2006). Evidence-based treatments in the field: A brief report on provider knowledge, implementation, and practice. *The Journal of Behavioral Health Services & Research*, 33(2), 244-253.

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Figure Captions

Figure 1. Multi-level strategies for advancing EBP in social work.

Figure 2. Resources and partnerships for EBP implementation

Figure 3. Partnerships for EBP implementation

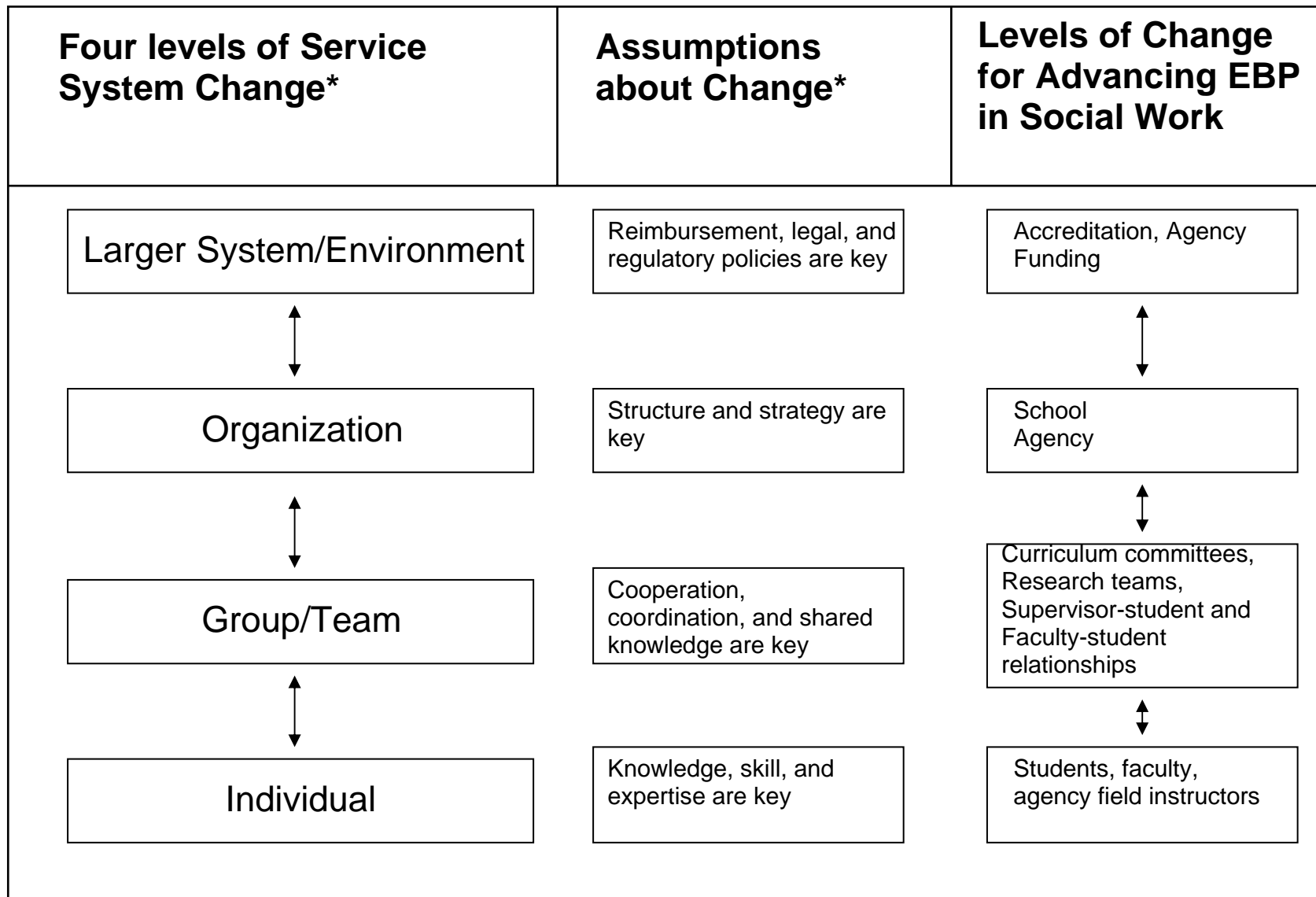


Figure 1. Multi-level strategies for advancing EBP in social work.

*Adapted from Shortell, Stephen M. 2004. Increasing Value: A research agenda for addressing the managerial and organizational challenges facing health care delivery in the United States. *Medical Care Research and Review*, 61(3): 12S-30S.

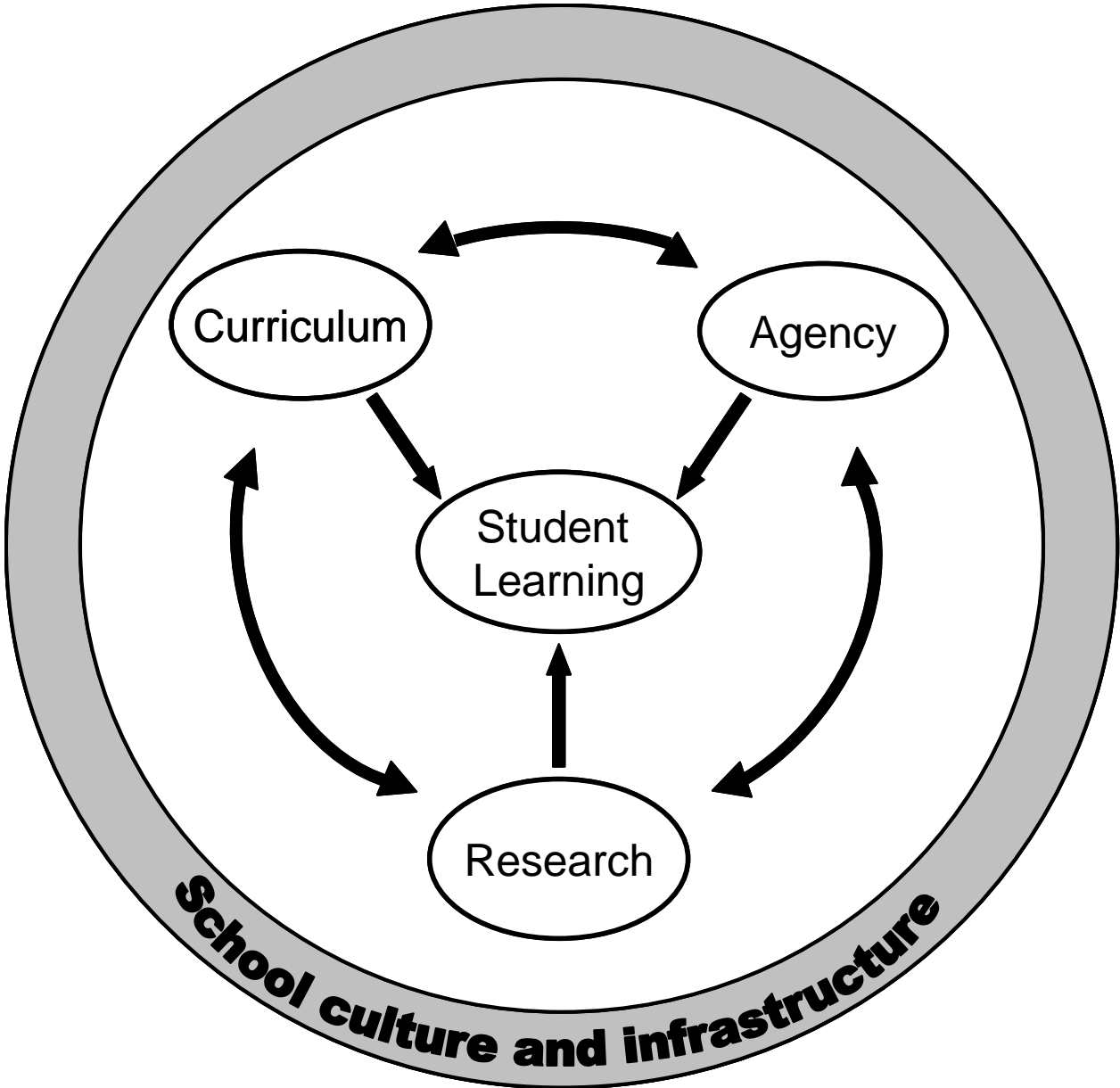


Figure 2. Resources and partnerships for EBP implementation

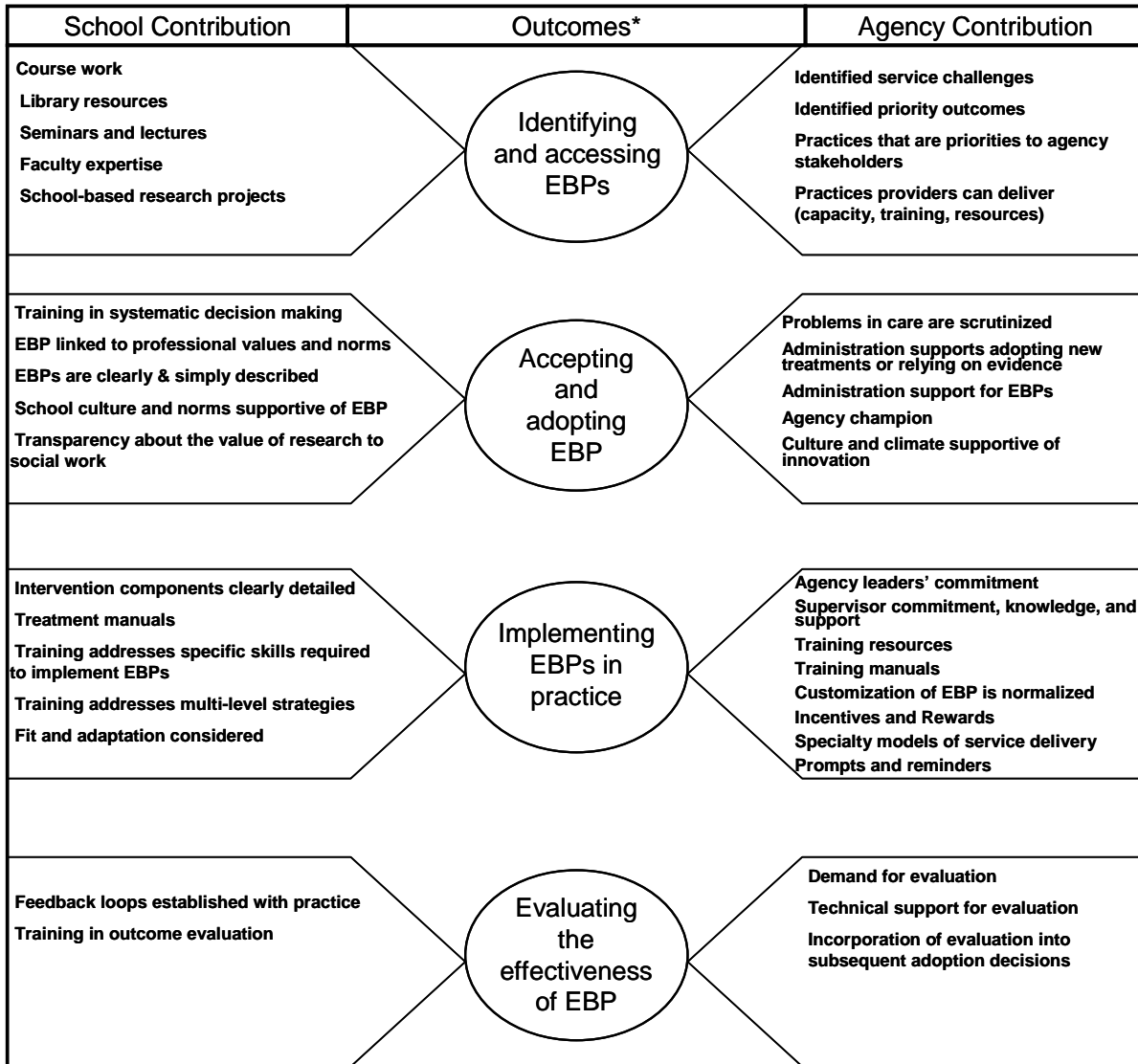


Figure 3. Partnerships for EBP implementation

*Outcomes adopted from Proctor, E.K. (2004). Leverage points for the implementation of evidence-based practice. *Brief Treatment and Crisis Intervention*, 4(3), 227-242.