at American Institutes for Research



## Handout 1: The Story of Evidence-Based Interventions

In medicine, there has been a clear shift to evidence-based practices (EBPs) across the years. There was a real debate in the profession initially because at one time medical practice was based on loose bodies of knowledge. It was not unusual to offer cures and remedies without valid scientific evidence on which to justify those practices and recommendations. For example, in very remote and rural locations, it was not uncommon for the local doctor to be a clinical practitioner who relied on folklore and traditions versus EBPs.

In medicine, there was a distinct paradigm shift, especially with developments in the Veterans Affairs (VA) system and insurance companies getting involved and refusing coverage of practices lacking in, for example, systematic evidence. More specifically, these groups essentially made clinical variability a thing of the past.

In education, the paradigm shift did not really happen in the same way. It was not a discussion and a progression in the field as a whole. Evidence-based interventions (EBIs) did not really exist in the education vocabulary prior to the late 1990s. Of course, in areas such as clinical psychology, there was a history of evidence-based therapies with the understanding that EBPs did not capture everything (e.g., a depression therapy that is evidence based is going to work only if you also have a good therapist). Furthermore, being evidenced based does not guarantee that an intervention will work.

At the same time, most professions understood the importance of EBPs and interventions, and it was really difficult to argue not to use them. Randomized controlled trials (RCTs) were becoming the new normal (e.g., standard practice), but one of the biggest criticisms related to RCTs was that they often missed specific cultural groups or models.

With the passing of the Elementary and Secondary Education Act (ESEA) in the mid-1960s, equal access to education and the establishment of high standards and accountability came into the forefront of conversation in education. One of the aims of ESEA was to decrease achievement gaps between students by providing each student with fair and equal opportunities to achieve an exceptional education.

If you fast-forward to the 2004 legislation changes, accountability was introduced into education with the Individuals with Disabilities Education Act (IDEA) along with changes in teacher qualification standards. As a result, EBIs and EBPs were "slipped" into the profession/field as the new normal without really ever having had a discussion about it. Consequently, the argument and the general complaint that have emerged about EBIs indicate that validated interventions on their own do not always equal success. Selecting the best intervention is not always the solution. At best, EBIs are not "stupid" choices. However, there is some onus and responsibility on the teacher or the practitioner to breathe life into the intervention or the strategy for it to work as it is intended.

It also is important to note that EBIs at Tier 1 and Tier 2 will not be the same at Tier 3.

Let's look at how tiered interventions work using the example of preventing the development of AIDS through prevention efforts, starting with education about HIV. Interventions and strategies at Tier 1 are very different from those at Tier 3. Tier 1 addresses the public health mindset, whereas Tier 3 is very individualized to meet the needs of a specific population. It is highly likely that you will catch about 80 percent of the people at Tier 1, which still leaves about 20 percent unaccounted for. If something is not working at Tier 1, then you probably need to think about trying a new approach in Tiers 2 and 3. As you can see, each tier is not just an acceleration of the previous tier. If we bring it back to a school example, this is why functional relevance is very important. It is a different mind-set when moving from Tier 1 to Tier 2 and especially to Tier 3.

Let's look at another example. Think about medicine or the medical field. In medicine, no one is expected to work across the three tiers as such. For example, you very rarely find a surgeon in Chicago moonlighting at a clinic in Boston as a general practitioner.

The main point here is that only in education do we have the expectation that the same people do the selection and conduct Tier 1, 2, and 3 interventions. This means that educational professionals must be highly knowledgeable about each tier of EBI and how the differences in each tier impact daily practices.

