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Letter to editor

Action Mapping: A Backward Design Approach to Educational Design

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Dear Editor,

Training in medical education is expected to serve not only for knowledge acquisition but also for preparing learners for their clinical and professional practice. Nevertheless, in some cases of instructional design, content is created first, and only then learning goals are set. Sometimes, the connection between educational content and practice is ambiguous, making training long and resource-intensive and resulting in inefficiency (1). In contrast, Action Mapping was created by Cathy Moore, who began from another angle. In her approach, we do not begin with a list of things to teach; instead, we start with the practical issue: what do people need to be able to do better at the end of training? Actions to be performed serve as a blueprint. Then, activities and information needed to carry out those actions are chosen (2, 3). This backward, performance-oriented logic can be particularly relevant to medical education, where the ultimate purpose of many educational interventions is to support competent practice (4, 5).

Beyond this structural shift, Action Mapping also addresses the performance problem and the context in which it occurs. Input from relevant stakeholders, including managers, educators, and learners, can help clarify what needs to improve and what constraints may affect the design of the intervention. In medical education, such collaboration may help ensure that educational activities address genuine clinical and organizational needs, for example, improving diagnostic decisions or strengthening performance in emergency situations. At the same time, avoiding content that does not contribute to the intended performance may help make better use of limited training time and resources (6).

It is also worth comparing Action Mapping directly to the broader backward design model. Both approaches encourage designers to begin with the desired outcome rather than with content alone. Backward design has been discussed in health-professions education, including nursing education, as a way of creating closer alignment among outcomes, learning experiences, and assessment (7). Action Mapping extends this performance-focused perspective by emphasizing the actions required in the workplace and by asking whether training is the most appropriate response to the identified problem.

However, Action Mapping is not a synonym for simulation. Simulation is a valuable instructional method for recreating clinical situations and allowing learners to practice in a safe environment. Action Mapping, by contrast, is a design framework. Simulation may be selected as one of the learning activities, but it is not required. Depending on the performance objective, case discussions, role-plays, guided decision-making

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exercises, or on-the-job practice may be more appropriate. The key principle is that the instructional method should follow from the performance goal rather than be selected in advance.

Given the persistent demand for practice-relevant and organization-responsive education, we believe Action Mapping deserves serious attention. We suggest piloting it in residency onboarding programs first, comparing its efficiency against traditional topic-based curricula. Greater attention to this approach could encourage the development of educational interventions that are more closely connected to real clinical tasks and workplace needs. We hope that discussing and evaluating its application in medical education will enrich the broader conversation about how to move instructional design beyond mere content coverage toward measurable and meaningful performance improvement.

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