

By Kinga Jacobson

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ork-based learning is a proven method for transferring knowledge to others. Although its meaning may be open to interpre-

tation, experts generally agree that it includes on- and off-campus workplace education, on-the-job training and service learning, which focus on learning, rather than teaching.

There is an increasing interest among educators, employers and community leaders in implementing work-based learning into schools as a means of enriching the academic curriculum with in-demand career skills development.

Beyond its positive effects on student achievement and engagement, work-based learning also benefits local stake-holders, who gain access to a qualified workforce and new talent for short- and long-term needs. From the microeconomic level, benefits ripple through in the form of state and national improvements and superior global competitiveness, leading to macroeconomic growth.

## **Historical Perspective**

From a historical perspective, work-based learning is one of the oldest forms of learn-

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ing, with early examples in agriculture, medicine, craftsmanship, etc., dating as far back as the start of human civilization.

In the United States, apprenticeships, as one of the most prevalent and socially integrated forms of work-based learning, served as a public assistance system of sorts for early settlers, often involving orphans and impoverished children in need of shelter and role models.

Whether for trades or for professional skills development, the traditional master-apprentice relationship was clearly defined in regard to the duties and rights involved. Over several years of workplace training the apprentice was to acquire the dexterities necessary for career success, while contributing free labor to the master's business. Although these arrangements were usually unpaid, they ensured safe housing and basic necessities for the trainee at the master's expense.

Other work-based learning relationships, especially those involving basic skills like harvesting, had much shorter timeframes. Many began at the start of the peak season and subsided after the work was completed. In these instances, the new worker was shown the essentials of the trade during the first few days of employment, and he was then expected to perform these simple duties for a negotiated wage.

Work-based learning was fundamental for the early economic growth of the United States. Industrialization and the rapid population increase representative of the early 20th century, however, rendered obsolete many of the traditional forms of work-based learning. Mass production required low skill levels and cheap labor, atypical for apprenticeships. Because factory hire and turnover rates were very high, the incoming uneducated workhands needed basic skills rather than expert craftsmanship.

With the economic shift came a significant social change as well, with education being defined more and more along the lines of school-based learning at the expense of workplace proficiencies. The project-based, lifelike, integrated-curriculum approach that flourished under such education reformists as John Dewey, Francis Parker and Friedrich Fröbel, with attention to free creative expression and emotional and social engagement, was gradually replaced by a new ideology proposing the supremacy of vocational skills for gainful employment and for supporting the needs of the expanding economy.

Under the leadership of Charles Prosser—credited as the father of vocational education in the United Statesthe breach between academics and applied hands-on experiences grew, resulting in an almost complete separation of the two ways of learning. The passage of the Smith-Hughes Act of 1917 ensured two divergent instructional tracks, affirming the viewpoint that a child's socioeconomic status was a key determinant in whether he or she chose a white-versus blue-collar career path. Students from wealthier backgrounds sought liberal arts schools that provided little, if any, hands-on practice. Others, however, were predestined for technical skills-heavy vocational training that lacked complex individual growth.

### **Current Viewpoint**

Luckily, the modern psychological findings of Brunner, Piaget, Vygotsky, Maslow, Gagne, Skinner and others, underscored the importance of holistic development, proving the benefits of connecting the active mind with an active body. Accelerated and hybrid programs encompassing practice and real-world applications proved that learning is faster and more effective when the whole person is engaged.

Even though initially educational experts advocated for teaching techniques leading to functional and academic competence alone, later they recognized the importance of affective factors and emotional engagement for effective learning. Consequently, theorists moved from the traditional single-minded approach of academic acumen to the view of multiple intelligences and interests as predictors of school and career success in the classroom and workplace alike.

In recent years work-based learning has been the focus of abundant educational research, being discussed in various leadership forums and educator peer groups nationwide. The applicability of work-based learning in secondary and postsecondary education has been reexamined, resulting in general support from theorists and practitioners alike. In fact, even politicians have been forthcoming in providing support for work-based learning and curriculum integration, securing the much-needed funding and legislation necessary for progress.

Engagement is now defined as involving the mind and the body of the learner. Feelings of security and respect, personally meaningful learning experiences, interests and goals are all considered key factors in an individual's advancement. Creating desirable environments that can reliably provide students with feelings of affection and connection toward learning entails easy-to-grasp lifelike settings, such as work-based and service learning projects, field trips and internships.

Currently, work-based learning is highly valued among educational authorities, although the transition from old-school methods to new, more effective ways is slower than anticipated. Connecting pure liberal arts curriculum, technical skills development and career preparation are gaining popularity, in the form of innovative and complex hybrid learning arrangements. Apprenticeships and on-the-job training have come full circle, being regarded as some of the most memorable

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and engaging experiences students can have during their formative years.

Work-based learning models vary between institutions. Some go with a mainstream setup, providing students with the option to register for independent study credits to be achieved in the workplace. These credits can be used in work-based settings for achieving the skills that students are lacking. Areas of deficiency can be determined by comparing program outcomes to the entry aptitude level of the enrollee based on uniform, industry standards-driven evaluation tools. Once the skills gaps are identified, educators create individualized work-based learning objectives for each learner, fulfilling the goal of providing comprehensive training for each student.

Other institutions prefer negotiated learning modules with individualized career or work-related competency content. Negotiated learning modules are another example of differentiated instruction because learners are allowed to test out and/ or show their competence in all the areas in which they have already mastered a skill through previous work/life experiences. For example, students who have worked in retail for a number of years are given credit for customer service skills based on their prior know-how. Yet, in the areas where students do not have creditable practical knowledge, they are asked to complete course sections and/or skills training, as applicable to their specific situations.

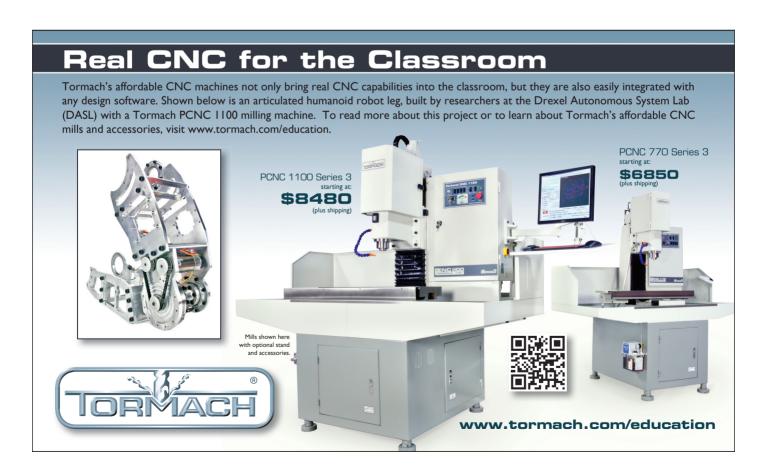
Finally, some institutions have a less flexible content-driven approach that uses pre-set modules that resemble traditional teaching in that they seek to achieve predetermined goals, except that the learning objectives are written with the desired competency set in mind. Students are to go through the module step by step, in the end demonstrating their aptitude in the targeted competency areas. This approach leads to an easier-to-administer, but more stationary, setup than the negotiated learning models. Additionally, this approach may be incapable of satisfying the dif-

ferentiated learning needs of the diverse career and technical education student body. In this case, all students follow the same educational path, without individualization of learning.

Each model has its definite benefits and challenges, including true adaptability to learner needs and wants, and being, in turn, potentially hard to manage and control from the standpoint of validation and quality standards, issues that are the focus of much debate.

Another debated aspect of work-based learning is the accreditation process. When students learn off campus, maintaining the quality level of the outcomes moves into the hands of the mentors and employers providing the training. Thus, it is essential that work-based learning arrangements are explicitly detailed in regard to the responsibilities and rights of all employers/trainers, students and educators involved.

In general, the more flexible the framework, the more complex the plan-



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ning and execution of the program. This is due to the multiple variables that play a role in the program's implementation, including the individual strengths and weaknesses of those involved in the management and facilitation of the learning experience.

Naturally, the closer the educational unit aligns with the learner's personal goals, interests and skill level, the more inherent is its likelihood of success. In fact, the more individualized and learner-focused the experience, the less supervision it is likely to entail. When students are engaged and interested in the learning outcome, perceiving it to be personally meaningful, they are more self-directed and proactive in seeking resources that lead to effective solutions.

In practice, time-challenged educators often cultivate programs that help them reach personal and curriculum goals simultaneously. This situation, when analyzed in the context of program effectiveness, tends to lead to wholesome work-based learning and curriculum-integration opportunities,

as professional networks can be relied upon for assistance. The energy-filled environment created by the teacher's passion fuels student engagement and has the tendency to be a predictor of notable outcomes. In fact, it is not unusual that such collaborations result in lucrative solutions and patented innovations beneficial for society at large.

Flexible delivery or not, the key to effective work-based learning plans is the strategy used for their formation. The planning process must keep in the fore-front questions such as target audience, facilitation, assessments, quality review, entry and exit competency levels, logistics, etc., prior to starting the actual planning of the program curriculum.

Next, the most effective mix of classroom- versus work-based learning must be determined, including specific instructional goals and activities for each. Despite their distinct settings and specific strengths and challenges, a way must be found in which the two work in tandem

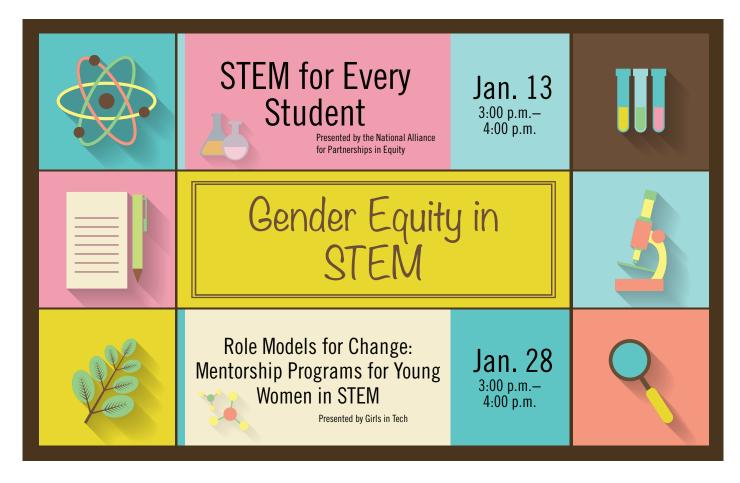
to advance the achievement of the desired learning outcomes.

#### **Future Outlook**

As employers, school administrators and political leaders become increasingly tuned into understanding the benefits of these learning activities, much progress is likely to be made in creating alignments and eliminating barriers that have traditionally hindered establishment and/or implementation of work-based learning efforts. In addition to advocating for integrated curriculums, supportive legislation is likely to follow, with potential appropriations and grants to enhance wide-range implementation.

It is hoped that, given the proven success of work-based learning, school administrators and employers alike will urge their reports to seek and expand creation of such experiences for their learners and employees.

Simulation exercises, role-playing, community projects, internships and other activities are all means for providing



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students with meaningful learning that lasts. Connecting to academic subjects by transforming abstract concepts into familiar life occurrences, while reflecting on their significance, is one of the most effective forms of intellectual development and personal growth.

Other opportunities for work-based learning integration in school curriculum include recycling events, fundraisers, volunteering, co-teaching with business and community experts, apprenticeships and internships. For example, students in science classes can collaborate with local non-profits on electronics recycling, local bankers can provide branch tours and/or skills training to business education students, and learners can develop 21st-century skills by engaging in community service learning projects.

Furthermore, career and technical educators can organize apprenticeships and internships with local employers in a wide array of career fields ranging from office administration, retail sales, manufacturing, agriculture and utilities services. Prospects for work-based learning can be found everywhere, creating limitless chances for enhancing learning through compound-learning experiences.

From an educational leadership perspective, implementation efforts will need strong and consistent administrator support. Those leading the way by experimenting with new approaches need to be able to take risks and fail, should that be the case. Odds are, however, that fully onboard teachers, who are willing to take ownership of fresh initiatives, will reap success, leading to others wishing to join in. As pioneers are bound to encounter some roadblocks along the way, backing them is essential for sustained progress.

#### Conclusion

The outlook for work-based learning is bright. It is likely that as the benefits of complex programming spread and become more widely accepted, educators will take the lead in reaching out to their communities, business partners and peer professionals to generate learning opportunities that engage the body and the mind alike.

It is also foreseen that data-proven results will promulgate state and national legislative changes, moving the U.S. educational system closer to a desired state of comprehensive education that engages the whole individual, inside and outside the classroom. Doing so will allow workbased learning opportunities, the involved students and our country to thrive, now and for many years to come. Tech

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