

Working Learners Research: Literature Review

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Executive Summary

Working learners represent a growing and important segment of the American population. The ACT Foundation defines “working learners” as individuals who are both working for pay and enrolled in formal learning programs that lead to a recognized credential. They are the majority of part-time students and more than a third of the full-time student population. Ideally, there would be deliberate connections between formal work and formal learning—connections that would build on learning and work experiences to create benefits for students, the businesses that employ them, and the American economy. ACT Foundation is interested in working learners because they want to better understand the conditions under which working learners work and learn. With a particular focus on low-income working learners between the ages of 14 and 29, ACT wants to know more about what it means and what it takes to create purposeful connections between working and learning (ACT Foundation, 2014).

This literature review highlights the current research and approaches to working and learning detailed in peer-reviewed literature and trade publications. The paper details the definition and common characteristics of a working learner, motivations for working and learning, and the impact of working while learning on high school and college students. Further, the paper provides an overview of experiential learning and explores how institutions and employers experience the benefits of work and learn approaches. Key findings include:

- ***The characteristics of a working learner.*** The ACT Foundation suggests working learners share several commonalities, including an integration of professional goals and personal life, an interest in applying and practicing what they learn, problem-solving ability, and a viewpoint that connects and intermingles personal aims, learning, and work (ACT Foundation, 2014).
- ***The motivations of working learners.*** The main reasons these students are driven to work and pursue a credential at the same time are financial necessity and opportunities to network and grow professionally while enrolled in a program of study (Elling & Elling, 2000; Divine, Linrud, Miller, & Wilson, 2007; Cuccaro-Alamin & Choy, 1998). Understanding the conditions for success around these motivations is critical for researchers and practitioners seeking to create greater opportunities for success.
- ***The potential impact of work and learn.*** According a report from National Center for Education Statistics (NCES) (2016), working learners make up 76% of the part-time student population and 40% of the full-time student population (Kena, Hussar, McFarland, de Brey, Musu-Gillette, Wang, & Ossolinski, 2016). Strengthening connections between work and academic studies could make a large difference for millions of students. Additionally, with 28% of high school students, 72% of undergraduate students, and 82% of graduate students working at least part-time while going to school (U.S. Census Bureau, 2013), we need to know more about how these working learners acquire knowledge and make connections between their work experiences and their academic lives.
- ***Known benefits of experiential learning.*** Early research on experiential learning laid the groundwork for understanding how experience is essential to the learning process. These principles continue to provide a theoretical foundation for work and learn programming and opportunities.

- **Benefits to students.** In high school, some hours (i.e., no fewer than five hours and no more than 20 hours) of work per week can be positive for student outcomes such as academic achievement and labor market outcomes (Dundes & Marx, 2006). In college, students who work a limited number of hours are more likely to complete their degree and acquire skills essential to success in the workforce than students who do not work. Additionally, college students not employed generally report lower grade point averages (GPAs) and less satisfaction in their academic experience than working learners do (Hossler, Ziskin, Kim, Cekic, & Gross, 2008; Pascarella, 2001).
- **Benefits to institutions.** Institutions that offer internships find that working learners who complete internships enrich the classroom (Swift & Kent, 1999), thereby creating a more fulfilling experience. Another benefit for the institution is faculty that are engaged with industry, which allows the institution to boast depth and breadth for working learners. Institutions that foster and reward faculty that are more up-to-date on industry practice and also have deep knowledge of their individual fields of study and practice can promote an environment that allows for a stronger connection between industry and what a student is learning in his or her academic experience (Divine, Linrud, Miller, & Wilson, 2007).
- **Benefits to employers.** Employers find that internships are an excellent opportunity to find and acquire talented employees and also create strong relationships with educational institutions and the community. When this happens, employers become part of a symbiotic relationship with local academic institutions, one in which they benefit from talent acquisition opportunities as well as the opportunity to advise and inform curriculum.

Although existing research suggests there are benefits of work and learn experiences for students, institutions, and employers, and that some forms of working and learning (e.g., experiential learning) are especially beneficial for students, there are critical gaps in the research.

- First, the existing research on working students does not point to the interplay of social factors (such as race, ethnicity, and socioeconomic status), motivation, and impact when suggesting various “effective” models and best practices. This deeper understanding would allow researchers and practitioners an opportunity to learn about the lived experience of a variety of different types of working learners.
- Second, data do not follow working learners over time. Longitudinal studies are needed to explore the long-term impacts of working and learning.
- Third, institutional data collection practices around working learners lack maturity and robustness. More sophisticated data collection practices could potentially allow researchers and practitioners an opportunity to answer different questions and come to solutions quicker with alternative data collection processes.

In conclusion, the research addressed here aims to serve as a basis for future research on working learners. It also serves as an initial source of guidance toward creating a comprehensive catalog of the types of formal work and learn approaches and solutions in the United States; the key characteristics for each type of approach; the perceptions of work and learn providers concerning implications of policy on work and learn approaches and solutions; and what effectiveness measures (if any) these programs are using.

Working Learners Research: Literature Review

Introduction

The ACT Foundation (2014) defines working learners as individuals who are both working for pay and in formal learning programs that lead to a recognized credential. A work and learn approach, thus, encompasses situations in which an individual is engaged in formal learning concurrent with working for pay. Of the 30 million students in the U.S. currently enrolled in high school, college, or graduate school, a large proportion are considered working learners. Specifically, 28% of high school students, 72% of undergraduate students, and 82% of graduate students work at least part-time while going to school (U.S. Census Bureau, 2013).

They are part of a movement that has great potential. With the changes in demographics, public support for education, and the American economy, working learner models are poised to meet the needs of the 21st-century student and the demands of the 21st-century marketplace.

Employers in the ever-evolving, knowledge-based economy¹ are in need of a skilled labor force (Haigh & Clifford, 2011). Of the almost 47 million job openings that the U.S. economy will create by 2018, researchers say 63% will require that the employee has least some college education (Carnevale, Smith, & Strohl, 2010).

But affording college is hard for many. With rising tuition costs that outpace inflation and the median family income, coupled with decreasing public funding for higher education, a

¹ Knowledge is now recognized as the driver of productivity and economic growth, leading to a new focus on the role of information, technology, and learning in economic performance (Organisation for Economic Co-Operation and Development, 1996). The term “knowledge-based economy” stems from this fuller recognition of the place of knowledge and technology in modern OECD economies.

college degree is not easily attainable (Desrochers & Kirshstein, 2012).² As students increasingly need to find ways to pay for mounting tuition costs (Elling & Elling, 2000) and acquire skills needed to succeed in the workforce (Carnevale, Smith, & Strohl, 2010), “working learner”³ models can help fill in the gaps.

These models also provide additional benefits. Although students work for a variety of reasons, such as gaining valuable knowledge and skills for their career (Coco, 2000), paying for their education and expenses (Cuccaro-Alamin & Choy, 1998; Elling & Elling, 2000), or obtaining a particular credential and/or advance in their job (Horn & Berktold, 1998), working also helps students gain knowledge, skills, and abilities that can be valuable in both education and career.

This literature review seeks to uncover factors associated with the growing number of students who work and learn. Although scholars (e.g., Carnevale, Smith, Melton, & Price, 2015) explain trends, characteristics, and experiences of working learners while addressing the potential impacts of balancing work and school, we find that the existing research about working learners lacks intentionality around how working and learning might come together to achieve important goals. Specifically, we believe work and learn programs have the potential to create

² After adjusting for inflation, 47 states—all except Alaska, Wyoming, and North Dakota—are spending less per student than they did before the recession (Mitchell & Leachman, 2015).

³ The ACT Foundation defines *working learners* based on eight attributes and tendencies described in “National Learning Economy: The NEW American Dream” and listed below:

- 1) They “integrate their professional goals and personal lives.”
- 2) They “are interested in learning and practicing what they learn right away, and are more interested in learning that supports family, life, or career goals rather than focusing exclusively on college credits.”
- 3) They “are focused on developing performance-based portfolios of knowledge, skills, and abilities from a variety of learning systems rather than taking courses that may or may not prepare them for existing jobs.”
- 4) They “are productive, hard-working, pursuing success, and seeking new opportunities for life satisfaction.”
- 5) They “are often adept at multiple skills and capable of drawing on one or more of them to solve new and complex problems.”
- 6) They “are technology literate and willing to learn new things in different ways with or through employers and industries, in postsecondary institutions, or on their own.”
- 7) They “find passion in what they do across multiple aspects of life, learning, and work; face adversity with courage and commitment; push limits; and constantly seek new challenges.”
- 8) They “view their personal, learning, and working lives as an integrated life-long journey that will incorporate many changes, including career, education, family, and even region of residence.”

even greater student success, strengthen the education pipeline, and improve the national economy.

Research suggests that learning (and subsequent progression through the education pipeline) happens best when it is placed within a larger context and, as such, paired with experience, observation, or reflection (Association of American Colleges & Universities, 2007; Jarvis, 1987; Kolb, 1984, 2014; Vygotsky, 1978). Evidence suggests that experience and application of knowledge is crucial to student success (Vygotsky, 1978). Given that, the lack of attention to working learners in existing research is a missed opportunity, since working and learning may have broad implications for learning and educational attainment.

The research presented in this review will address the education pipeline from high school through the workforce. We will pay particular attention to students enrolled in postsecondary education, considering them the primary work and learn population. This paper aims to contextualize “working and learning” by examining working learners and the factors involved in their decision(s) to work and learn, as well as their subsequent educational and career trajectories. It also highlights the benefits of working while learning through a review of the literature on student employment, particularly cooperative education and internships.

Last, we argue that understanding the positive effects of work experience for students is crucial for creating meaningful policy and encouraging effective practices. We believe particular attention should be paid to understanding who the working learners are, the types of working and learning situations that are the most beneficial, as well as the various intersections of motivations, social factors, and time commitment and how they impact one another.

Experiential learning theories and practices

Kolb (1984) provides a working definition of learning to be “the process whereby knowledge is created through the transformation of experience” (p. 38). His viewpoint highlights

the importance of the experiential perspective in education. Kolb's work builds upon experiential models of learning from the scholars Lewin (1944), Dewey (1938), and Piaget (1977) and notes three principles of experiential learning (Kolb, 2014).

First, learning is best conceived as a process and not in terms of a particular outcome (Kolb, 2014). Second, learning is a process that is derived continually and is grounded in experience (Kolb, 2014). Third, learning requires the resolution of conflicts among various ways of dealing with the world (Kolb, 2014). Each premise is implicit to working and learning, and all are important concepts to frame the following considerations of working learners.

Realities for working learners

Recent research (Carnevale, Smith, Melton, & Price, 2015) has identified a number of commonalities among working learners. These learners integrate their professional goals and personal lives (ACT Foundation, 2014). Although the degree of integration may vary depending on the situation, and some working learners place more emphasis on one aspect versus the other, each working learner balances the demands of both work and education. Additionally, working learners share an interest in applying and practicing what they learn, solving problems, honing knowledge, and developing multiple skills and abilities through various pursuits toward a performance-based portfolio (ACT Foundation, 2014). Last, in ideal working and learning experiences, working learners view personal aims, learning, and work as intermingled aspects of life (ACT Foundation, 2014). These commonalities offer the basis for the definition of a working learner, as well as a lens through which to consider the impacts of working and learning and recommendations for policy and practice.

Although each working learner may face a unique set of circumstances, any shared characteristics or observable trends in this population may help employers, institutional

practitioners, and policymakers better design and deliver effective work and learn experiences that could improve student learning and outcomes.

Research (Carnevale et al., 2015) suggests that certain types of individuals are most likely to work while simultaneously being enrolled in school. Women are more likely than men to be working learners, according to Carnevale, Smith, Melton, and Price (2015). Their study found that the majority of young working learners⁴ are white (62%) and enrolled in baccalaureate programs (56%). A closer examination of mature working learners⁵ reveals African Americans are disproportionately represented (when compared with census data) as working learners; African-Americans make up approximately 12% of young working learners and about 23% of mature working learners (Carnevale et al., 2015). Hispanic young working learners are about 16% of the working learner population and approximately 13% among mature working learners. Further, learners of a mature age are more likely to be enrolled in two-year (58%) and for-profit institutions (24%); more than half (54%) of young working learners are in public and private, not-for-profit, four-year institutions, with the rest in two-year public institutions (36%)⁶ (Carnevale et al., 2015). These data highlight certain trends that are important to understand when developing and/or offering work and learn opportunities.

Enrollment status and hours worked per week are also important factors in defining the characteristics of working learners. Data from a report from the National Center for Education Statistics (2016) indicate a number of patterns in student employment for full-time compared with part-time students (Kena et al., 2016). Full-time students are employed at lower rates than part-time students (40% versus 76%), and the largest percentages of these students generally work between 20 and 34 hours per week. Although very few (7%) full-time students exceed 35

⁴ 16–29 years old according to *Learning While Earning: The New Normal*.

⁵ 30–54 years old according to *Learning While Earning: The New Normal*.

⁶ Less than 10% are in other institutions.

hours of work per week, three times as many (35%) part-time students work 35 hours or more per week (Kena et al., 2016).

Patterns of hours worked by enrollment status are similar across institutional sectors (Kena et al., 2016). For example, full-time students enrolled at four-year public, four-year private, two-year public, and two-year private institutions all represent similar proportions of students working fewer than 20 hours per week at 14%, 15%, 14%, and 10%, respectively (Kena et al., 2016). Details of this most recent data are included in Tables 1, 2, and 3 below.

Table 1
Student⁷ Employment in 2013

Enrollment status	Employment rate	Work <20 hours per week	Work 20–34 hours per week	Work 35 hours per week or more
Full-time	40%	14%	19%	7%
Part-time	76%	11%	29%	35%

Note: Number of hours worked per week excludes those individuals that were not employed during data collection. Source: National Center for Education Statistics (NCES) College Student Employment Data. Retrieved from <http://nces.ed.gov/pubs2016/2016144.pdf>

Table 2
Full-Time Enrollment Status Student⁸ Employment in 2013 by Control of Institution

Type and control of Institution	Work <20 hours per week	Work 20–34 hours per week	Work 35 hours per week or more
Four-year public	14%	19%	7%
Four-year private (nonprofit)	15%	13%	6%
Two-year public	14%	21%	7%
Two-year private (nonprofit)	10%	25%	10%

Note: Number of hours worked per week excludes those individuals that were not employed during data collection. Source: National Center for Education Statistics (NCES) College Student Employment Data. Retrieved from <http://nces.ed.gov/pubs2016/2016144.pdf>

⁷ Student is defined as 16- to 24-year-old undergraduate and graduate enrolled at a postsecondary institution.

⁸ Student is defined as 16- to 24-year-old undergraduate and graduate enrolled at a postsecondary institution.

Table 3
Part-Time Enrollment Status Student⁹ Employment in 2013 by Control of Institution

Type and Control of Institution	Work <20 hours per week	Work 20–34 hours per week	Work 35 hours per week or more
Four-year public	10%	27%	41%
Four-year private	22%	30%	35%
Two-year public	9%	30%	31%

Note: Number of hours worked per week excludes those individuals that were not at work during data collection. Two-year private institutions were not represented in this dataset.
 Source: National Center for Education Statistics (NCES) College Student Employment Data. Retrieved from <http://nces.ed.gov/pubs2016/2016144.pdf>

Motivations for working and learning

The reasons why a person decides to work and go to school are critical for employers, policymakers, and educators to understand as they consider how to support these types of students. Those who work and learn are often motivated by myriad factors such as finances (Elling & Elling, 2000), a desire for professional development (Divine, Linrud, Miller, & Wilson, 2007), and the need for a credential (Cuccaro-Alamin & Choy, 1998). The following subsections dive deeper into each of these three areas. We believe, given the variety of motivations and needs of students, it is important to work toward creating an exhaustive list of influences and variables that inform student decisions regarding participation in work and learn programs in order to best support students.

Finances

Two of the primary reasons students elect to work while enrolled in school are to earn more money for college-related expenses (e.g., tuition) and to earn money for general life expenses (e.g., rent, car payments, etc.) (Cuccaro-Alamin & Choy, 1998; Ehrenberg, 2000; Gladieux & Perna, 2005; King, 2002). One study found that as much as 41% of students

⁹ Student is defined as 16- to 24-year-old undergraduate and graduate enrolled at a postsecondary institution.

entering college intended to secure a job in order to pay for the costs of college (Elling & Elling, 2000).

With many students looking to work and learn as a way to offset education costs, institutions can do a great deal to implement policies friendlier to these working learners. For instance, researchers suggest that one simple step for institutions could be to ensure that fees for typical student services that non-traditional students do not utilize be eliminated (Palloff & Pratt, 2003). Moreover, just as many institutions implement specialized policies for working learners taking online classes, institutions can expand on that effort to consider specialized supports for working learners taking classes on campus.

Professional development

Professional development is a significant motivator for working learners. While some working learners are professionals in the workforce who return to school to advance their careers (Coco, 2000), an individual that primarily identifies as a student may decide to secure a job to learn more about a particular field of interest or to gain experience toward securing a job after graduation (e.g., career-related internships, cooperative education) (Coco, 2000; Divine et al., 2007; Page, Geck, & Wiseman, 1999). It is important to consider these motivations because they suggest that students recognize and actively seek out the types of professional development each domain (i.e., learning and work) lacks on its own. Both educational institutions and workplaces should keep professional development in mind and seek out ways to offer it to working learners.

Credential/licensing requirements

Because some professions require credentialing or licensure in order to practice in the field, individuals interested in these fields need to obtain that credential or license (Stern & Nakata, 1991; Cuccaro-Alamin & Choy, 1998; Horn & Berkold, 1998). For example, if one is

interested in practicing law, one must complete a Juris Doctor (J.D.) degree and pass the bar exam. To become a physician, one must complete a Doctorate of Medicine (M.D.) and pass the board exam. The motivations (e.g., finances, professional development, credential/licensing requirements) detailed above are important to consider when trying to better understand the working learner. Finances, professional development, and credential/licensing requirements are also important factors to understand when offering access to opportunities and enticing participation in experiential learning programs.

Working and learning in high school

The research on the impact of working and learning in high school provides conflicting evidence regarding measures of academic achievement and grades, educational attainment, social abilities, and labor market outcomes.

Working while in high school may positively influence future labor market outcomes (Ruhm, 1995; Light, 1999, 2001), as students have the opportunity to gain early, invaluable workplace experience and can apply the knowledge they have gained to their coursework.

Much of the literature examining high school student employment indicates that the number of hours worked in a week can have differential impact on student outcomes (Cheng, 1995; Greenberger & Steinberg, 1986; Marsh & Kleitman, 2002; Payne, 2003; Warren, LePore, & Mare, 2000). Research indicates that some number of hours of work per week can be positive for student outcomes (Marsh & Kleitman, 2005). Although that particular number is in question, it is generally agreed that it is between 5 and 20 hours per week. That is, there is no realization of positive student outcomes with fewer than 5 hours a week and that such benefits are found up until 20 hours a week. Beyond the 20-hour-per-week mark, however, we see negative effects of employment for high school students. For instance, longer hours worked can lead to increased absences in school, a greater likelihood of dropping out of school (Warren & Lee,

2003), and lower academic effort and performance (Payne, 2003; Post & Pong, 2000; Singh & Ozturk, 2000; Weller et al., 2003). Payne (2003) writes that, particularly during key transition periods such as between high school and postsecondary education pursuits, negative impacts of increased work can be amplified. Weller, Kelder, Cooper, Basen-Engquist, and Tortolero (2003) found “significant, but modest,” differences in school performance between high-¹⁰ and low-intensity¹¹ workers, reporting a one-quarter letter grade lower average for high-intensity working students compared with their low-intensity counterparts. Ruhm (1995) and Tyler (2003) find that intensive employment has a negative impact on persistence and 12th-grade math achievement.

Further, scholars suggest that the way we consider employment for high school students be assessed with relation to the time spent on schoolwork (Marsh & Kleitman, 2005). In other words, working may take time away from homework, therefore jeopardizing grades. Rothstein (2007) asserts that the type of work and how the work interacts with schooling highly influence high school completion.

More thoughtful and comprehensive considerations of work and learn are needed to truly assess the benefits and challenges for high school students. Furthermore, there is a scarcity of research when it comes to the youngest cohort of working learners, 14- and 15-year-olds. Collecting research on this cohort can help inform findings and research conducted on high school and postsecondary cohorts.

Type of work and how students approach it matter, too. As Holland and Andre (1987) argue, “experiences that further the total development of the individual students” (p. 438) are important for developing a sense of responsibility that may actually have a more positive

¹⁰ 21+ hours of work.

¹¹ 1–10 hours of work.

influence on academic achievement. Thus, in high school, as in postsecondary education, the literature suggests that students are best served by work and learn programs when work is treated as a vehicle for experiential learning.

Working and Learning in College

Although the research above addresses students who work while in high school, the majority of research about working and learning involves students enrolled in postsecondary education. There is a large body of evidence (e.g., Kuh, Kinzie, Buckley, Bridges, & Hayek, 2006; Pascarella & Terenzini, 2005) that considers working and learning for undergraduate and graduate students and suggests impacts and outcomes of student employment. Generally, this research is situated within a larger body of evidence examining how particular college factors such as teaching, institutional environment, and rigorous coursework influence the experience of a college student (Astin, 1993; Pascarella & Terenzini, 2005). Studies often associate these factors and outcome measures such as academic performance (as a proxy of learning) and degree attainment with college success (Pascarella & Terenzini, 2005). Student employment is most often addressed in literature that focuses on the impact of college, as it has been shown to influence the student experience. The literature tends to discuss evidence of impact in a few key areas detailed below: academic outcomes (i.e., cognitive outcomes, learning), persistence, and labor market outcomes.

Academic outcomes

Studies (e.g., Pascarella & Terenzini, 2005) point to the impact of work and learn on cognitive outcomes of education, such as academic performance and learning. Research on college students suggests that working while enrolled full-time may also be associated with a decrease in academic performance (Dadgar, 2012; DeSimone, 2008; Kalenkoski & Pabilonia, 2010; Kulm & Cramer, 2006; Pike, Kuh, & Massa-McKinley, 2008; Scott-Clayton & Minaya,

2014; Stinebrickner & Stinebrickner, 2003). However, as seen in the research on high school student employment, there are particular thresholds for the number of hours worked that are associated with particular benefits or drawbacks. For example, working 10–19 hours per week for college school students actually increases grades (Dundes & Marx, 2006).

Other researchers state that fewer than 20 hours of work per week had no effect on academic performance, and students generally reported that working was not negatively impacting their academics (Elling & Elling, 2000). Further, Elling and Elling (2000)¹² found that students who were not employed actually reported lower GPAs and less satisfaction in their academic experience than those who worked between 11 and 20 hours per week.

Persistence

A number of studies indicate that there are positive effects of work on persistence (e.g., Hossler, et al., 2008; Pascarella, 2001), with students who work (both on and off campus) being more likely to complete their degree.

Particularly, college students who work on campus between 10 and 20 hours per week may be more likely to persist to degree, according to some scholars (e.g., Astin, 1993; King, 2002; Pascarella & Terenzini, 2005; Swail, Redd, & Perna, 2003), because of the relationships and connections they formed while working for the institution at which they were also enrolled. Students who work off campus do not necessarily experience such a benefit, as the demands of their employment may preclude them from taking part in educational activities such as study-abroad (Kuh et al., 2006).

Labor market outcomes

Students who work and learn may experience more direction in their career aspirations, be more assured of their career path, and be better prepared to enter a professional position

¹² Non-controlled study.

(Page, Geck, & Wiseman, 1999). Students with prior work experience with a specific employer may also be more marketable to that employer, as it often serves as a useful vetting process compared with the traditional hiring process (Swift & Kent, 1999). Additionally, students develop “soft skills” or non-cognitive skills that are crucial to succeeding in the labor force, including leadership skills (Cook, Parker, & Pettijohn, 2000; Divine et al., 2007), interpersonal skills (Beard & Morton, 1999; Divine et al., 2007; Gault, Redington, & Schlager, 2000), and persistence (Kulm & Cramer, 2006).

Further, college students who work have increased knowledge of industry (Coco, 2000; Divine et al., 2007), understand how to apply classroom knowledge to practical problems (Hyman-Parker & Smith, 1998), and exhibit more maturity and confidence (Thiel & Hartley, 1997). Last, evidence suggests that participating in an internship while in college can lead to better job acquisition skills and more job offers, as postgraduate employment is possible with the same employer (Coco, 2000). Rigsby, Addy, Herring, and Polledo (2013) go a step further and discuss the fact that internship experience is generally linked with better job prospects and job acquisition outcomes regardless of where the internship was done, particularly in the business sector.

Benefits for institutions and employers

In addition to the body of literature on the academic impact of work and learn for students, there is a large body of research dedicated to the benefits of work and learn for institutions and employers. This next section explores benefits for those two constituent groups.

Institutional impact

According to Swift and Kent (1999), students who have participated in internships return from the experience and enrich the classroom conversation. Largely, institutions that offer internships find that their faculty are more up-to-date on the community and industry (Divine,

Linrud, Miller, & Wilson, 2007), and employers can be a great resource for providing meaningful information to a classroom, such as providing a type of skills “laboratory” in which students can apply what they’ve learned, providing input on curriculum development, and providing “ an additional forum for student and curriculum assessment” (Thiel & Hartley, 1997). There are also financial benefits to the institution, from advertising opportunities for the college to new funding sources in the form of corporate donations from potential employers and work and learn program company participants (Coco, 2000; Gault, Redington, & Schlager, 2000).

Employer impact

As a type of work and learn program, internships are excellent opportunities for employers to explore whether a student is a good fit for their organization without the need to commit to a long-term situation (Divine et al., 2007). Additionally, internship programs can be an employment strategy to find and hire permanent employees with reduced turnover (Knemeyer & Murphy, 2001). Strong employer and institutional relationships can help yield a steady stream of talent (Divine et al., 2007).

A report from the National Network of Business and Industry Associations (2015) further examines work and learn from the employer’s perspective and considers the various high- to low-touch models of engaging with working learners toward better outcomes. This review, alongside a new report from the Jobs for the Future (2016)¹³ on work-based learning, offers insight into not only the value of work and learn, but best practices for employers as well.

Areas for Future Research

The literature on the working learner presents a great deal of information regarding the characteristics of working learners, existing models of work and learn, and the impacts of working while learning. However, there are areas of impact that we know little about.

¹³ Kobes & Girardi, 2016

First, the existing research on working learners does not suggest how social factors, motivation, and impacts intersect in ways unique to each student. These intersections are largely overlooked when researchers and practitioners suggest effective models and best practices for work and learn approaches. Understanding these factors (e.g., social factors, motivation, and impacts) is important when creating solutions aligned to particular types of working learners such as first-generation, low-income students. With more thoughtful, evidence-based approaches to work and learn, employers, institutional practitioners, and policymakers may be better equipped to create environments that support working learners toward successful educational and professional outcomes.

Second, although there is a significant body of literature on work and learn, it seems that research largely focuses on cross-sectional research, rather than a longitudinal examination of long-term outcomes for this population of students. Therefore, existing research cannot sufficiently indicate the long-term effects of work and learn, as available data are not longitudinal. Student unit record data representing individuals during different phases in the education pipeline and beyond could allow for a deeper consideration of the long-term impact of working while in school. For instance, longitudinal research could suggest how work and learn experiences may have implications for students' earnings, careers, and success in the labor market over their lifetimes.

Third, the literature on the working learner does not sufficiently address the youngest cohort, those aged 14 and 15 years old. Often data and analysis begin with individuals who are at least 16 years of age. This earlier point in time (i.e., 14 years of age)¹⁴ may be a crucial juncture in students' lives, when they first are able to work and learn. It may represent the first time in a student's life that he or she experience additional opportunities to grow and learn

¹⁴ The Fair Labor Standards Act sets 14 as the minimum age for most non-agricultural work.

beyond what is offered in a classroom. And although students aged 14–15 who work may not represent a majority of working learners, we cannot assume that the issues that confront older working learners are also present in this younger population.

Overall, future research should consider ways to conduct more comprehensive examinations of working learners. The more we can understand about their experiences, particularly the factors influencing their challenges and successes, the more we can build and develop approaches that work. This deeper understanding would allow employers, institutional practitioners, and policymakers to be better informed in order to create effective solutions for students.

Recommendations

The final section of this literature review dives into recommendations for the work and learn landscape. Given a lack of comprehensive data on the outcomes of working and learning, our first recommendation covers this need. We believe data, when clearly communicated, can drive the success of work and learn models. Current research does suggest that working learners who work above a certain threshold of hours per week have increased likelihood of poor academic outcomes. Considering that the economic conditions causing a student to work full-time are unlikely to change, it is critical that employers and institutions offer specialized supports for working learners. Last, employment that aims to integrate academic pursuits with professional ones offers clear benefits to the academic institution of attendance, the employer, and the student and should be promoted where possible.

Structure work and learn models with clearly communicated data-driven outcomes and benefits.

Few studies suggest how the impacts of work and learn could be controlled and harnessed to achieve optimal student outcomes. Given the disagreement in existing literature

regarding the outcomes of working while learning, it is critical to consider outcomes before implementing a particular work and learn approach. This requires a careful examination of the particular aspects of programs that produce positive outcomes for students. We know that students are usually solely responsible for drawing parallels between their academic experiences, decisions, and career and economic outcomes (Bailey, Jenkins, & Jaggars, 2015). If the research can more clearly point to long-term effects of certain work and learn models, practitioners and policymakers may be able to more adequately structure programs and interventions to support work and learn students in greater skill development, educational attainment, and successful transition into the job market.

Conduct longitudinal studies so that we can better understand the impact of this research over time.

Currently, we do not know the long-term effects of work and learn models. We strongly suggest conducting longitudinal studies in order to assess the benefits of various work and learn models for students, employers, and institutions over time. This research could focus on a number of useful questions, such as: Are students more likely to advance in their careers at a quicker pace if they have these experiences? How is job retention affected by clear coordination between academic goals and professional goals?

Conduct research on working learners between the ages of 13 and 16.

The working learner population from ages 13 to 16 is under-researched. When students begin working in high school, they set the stage for the development of soft and content-specific skills important in higher education and careers. Understanding more about the various impacts of working and learning at this stage and the trajectories of these individuals will help us build supports early on to identify students' interests and goals. When interests and goals are identified and supported early on, it becomes far easier to set a precedent for understanding the

importance of aligning professional and academic interests. Here, we recall that Holland and Andre (1987) said that learning encompasses “experiences that further the total development of the individual students” (p. 438). In our discussion of high school work and learn programs, research demonstrates positive benefits to purposeful work endeavors that complement academic learning and achievement. Ideas on experiential learning articulated by Lewin (1944), Dewey (1938), Piaget (1977), and Kolb (2014) lend credence to the idea that work and learn programs have a role to play in identifying interests and goals (Kolb, 2014). Further research on the youngest cohort of working learners can help crystallize the impacts of such programs and frame existing research on high school and postsecondary work and learn programs.

Conduct more student voice research on working and learning experiences.

Working learners need to be at the forefront of the conversation about working and learning experiences. There are numerous opportunities to engage students and many questions to ask. What works well about various work and learn approaches? What is challenging? What supports are present and absent? How have students’ goals aligned and shifted over the course of working and learning? The more student voices are present in this research, the more prescient subsequent questions will be. Each working learner has a unique story, one that may not fall entirely within the bounds of what we currently know about working learners. The more we can learn about the variety of their circumstances and individual characteristics, the better we can make the academic and professional experiences of these students.

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