

The Integrated Basic Education and Skills Training (I-Best) Program: Equipping All
Adults for the Global Economy

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Employment skill deficiencies among American workers diminish the earning power of individuals and families, hurt employers and local economies, restrict the advancement of society in general, and weaken the reputation of the educational system. Individuals from the lower socio-economic quartile of our society, particularly people from non-dominant groups and those traditionally under-served by higher education are often discouraged by their lack of preparation for jobs in today's economy. Their despair is reflected in individual and personal costs of low job skills which are often manifested in terms of diminished self-worth and a lack of ability to support a family and contribute to the betterment of others. The nation and society also suffer because of the growing number of workers who have job skill deficiencies; there is a loss of tax revenue, a greater burden on social agencies, and a growing disillusionment with public schools, institutions of higher education, and adult education agencies. Whether the costs are personal or national, the lack of job preparedness and lower achievement is a challenge that has been ignored far too long.

The problem is magnified when it is examined in an era when tax dollars for educational programs are growing increasingly scarce. Higher education is experiencing decreased funding from all levels of government and increased demands for heightened accountability (Gladieux, King, & Corrigan, 2005). This situation has been particularly difficult for adult basic education programs which try to justify increased funding at a time when many prevailing measures indicate poor performance. The students who do persist for one year of study typically show only marginal gains (e.g., improvement from a fifth-grade to a sixth-grade level) which have minimal real-life returns (Grubb, Badway, & Bell, 2003).

Prior research (Prince & Jenkins, 2005) found approximately one-third of adult basic education students continue in postsecondary education, but an even smaller number earn an associate's degree or certificate. Amstutz and Sheared (2000) found the drop-out rate in adult basic programs to be as high as 80%. While these statistics are discouraging, the supporters of basic skills education have shown a continuing commitment to press lawmakers into funding adult basic education so the talents of millions of Americans can be tapped for the advancement of society.

Another challenge lies in the fact that the nation is growing older, and millions of Americans from the baby boomer generation are moving into retirement. The number of people aged 65 and older is projected to more than double from 35 million in 2000 to 71 million in 2030. While the number of retirees is increasing, the growth in the American workforce is slowing (Karoly & Panis, 2004). The consequences of this decline are serious because a robust expansion of the workforce is needed to pay into the tax system which supports the health and social services system. The financial impact on the nation could be damaging. Karoly and Panis (2004) suggested one possible solution to address the potential shortage of skilled workers is the recruitment of people who have been largely under-served by higher education: persons with disabilities, recent immigrants and others who may be deficient in basic skills. In recent years several states have implemented programs targeting citizens from these populations in an effort to expand the skilled workforce.

The need to prepare a skilled and technically-proficient workforce is especially important to Washington State because the number of adults aged 65 or older will increase from its current level of 662,000 to approximately 1.66 million in 2030, an increase from 11.2% to 19.7% of the population. Additionally, an aging population will put greater demands on all levels of government. The burden for providing health and support services for the nation's aging population will have to be shouldered by a shrinking workforce. In all states, the increased demand for health and social services coupled with fewer workers will require a highly skilled and well paid workforce in order to avoid significant cutbacks and hardship to some of the most vulnerable citizens.

The challenge is to educate low-skilled adults so they can fill the growing employment gaps. This undertaking is in many ways daunting. For example, according to the Washington State Institute for Public Policy, approximately 15% of the adult population is capable of reading at only the lowest literacy skill level. The working-age, low-skilled adult population in Washington is the same size as all of the high school graduating classes in the state from the years 2000 through 2011 (U.S. Department of Education, 2007). Without policy changes, by the year 2030 approximately 20% of Washington State's working-age adults will be considered low skill. To meet this challenge Washington has adopted the Integrated Basic Education and Skills Training (I-BEST) program. I-BEST is an instructional design which concurrently teaches basic and vocational skills through the pairing of an adult basic education or English as a Second Language instructor with a vocational instructor. Since I-BEST is a new program there has been relatively little research conducted on the program.

The I-BEST program simultaneously provides basic skills and training in high demand career fields. The pivotal role the instructors and administrators play in the process has been largely overlooked. The current study corrects this oversight. The purpose of this study was to identify factors contributing to the success of the I-BEST program, to explore differences in the perceptions of administrators and instructors regarding the I-BEST program, and finally to examine whether I-BEST instructors and administrators in rural communities perceived the program differently than their counterparts in non-rural areas.

Methodology

The study explored the I-BEST experience at the community colleges in Washington State. At the time of the study, the program had not been implemented anywhere else in the nation. There are 34 institutions in the Washington community college system serving over a quarter of a million students (WSBCTC, 2008). Public colleges span the state from the Pacific Ocean in the west, the Canadian border to the north, Idaho to the east, and Oregon to the south. Twenty-five of the 34 community colleges are located near the Interstate 5 corridor which runs from Oregon to Canada in western Washington. There are 16 rural serving colleges and 18 non-rural serving community colleges in Washington State as defined by the Carnegie Foundation classification. The research examined the perceptions of three groups of I-BEST professionals: instructors, program managers, and the managers' immediate supervisors.

Most of the responses were from instructors, who accounted for 67.7% of the total number of submissions. Table 1 provides a summary of the participants in the study, and Table 2 provides indicates the ethnicity of the respondents.

Table 1

Frequencies of Instructors, Program Managers, and the Managers' Supervisors

I-BEST Role	<i>N</i>	Percentage
Instructors	107	67.7
Program Managers	28	17.7
Managers' Supervisors	23	14.6

Table 2

I-BEST Participant Ethnicity

Ethnicity	<i>N</i>	Percentage
White	138	85.7
African American	3	1.9
Asian	7	4.3
Hispanic	–	–
Other	12	7.5

This quantitative study used a survey design to answer the research questions on the I-BEST program. Surveys provide an efficient and economical way to collect data, avoiding the travel time and expense of visiting each of the community colleges across

the state. A cross-sectional survey used a five-point Likert-type scale to rate the intensity level of an attitude relating to the program. An electronic survey instrument was developed, tested, and utilized to explore the perceptions of instructors and administrators. The Administrators and Instructors I-BEST Perceptions Survey (AIIPS) instrument (Fox, 2010) utilized a five-point Likert-Scale to assess participants' perceptions regarding the program. After the AIIPS instrument was pilot tested, an electronic mail notification along with a link to the survey instrument was sent to the instructors, program managers, and the managers' supervisors.

The data collection method involved administering a survey to I-BEST instructors, I-BEST program managers, and administrators who directly oversee the program managers (e.g., deans). I-BEST is operational at all of Washington's 34 community colleges. Administrators and instructors involved with the program at all the participating colleges will be surveyed. The community colleges are distributed across the state, providing a broad image of the diverse experiences of I-BEST instructors and administrators. An electronic survey was conducted because it provided an efficient means of reaching large numbers of participants and avoided the expense of postage. A cover email provided a brief request to participate in the survey, and included a statement about the importance of participating because of how the findings could improve the program for future users. The notification letter provided a web-link which directed the participants to the survey. Reminder emails were sent to the participants after the first and second weeks of data collection.

Data analysis of the survey responses consisted of both inferential and descriptive statistics. The descriptive statistics helped provide a clearer picture of the professionals who currently implement the I-BEST program. Inferential statistics were used to answer all five of the research questions. Specifically, *t*-tests were used to analyze the responses and determine whether there were statistically significant differences between the groups.

Two administrators from each participating community college completed the survey instrument: (1) the I-BEST program manager and (2) the individual who supervises the program manager in a mid-level administrative position. All the current I-BEST instructors were surveyed.

Discussion of the Findings

I-BEST Instructors and Administrators

The current study examined whether there were any differences in the perceptions of I-BEST instructors and administrators concerning factors that affect the I-BEST program. Table 3 presents the factors.

Table 3

Factors Affecting the I-BEST Program

- Adequate Resources are provided to insure the I-BEST Program is successful.
 - I-BEST instructional staff members feel supported in curriculum decisions.
 - ESL Students in I-BEST do not require additional support services.
 - Resources required for I-BEST have forced the college to reduce support for other programs.
 - The I-BEST Program supports the community college mission.
 - There is a sufficient number of qualified instructors for the I-BEST Program.
 - Transportation is a major challenge for I-BEST students.
 - The level of I-BEST Program Funding is adequate.
 - It is a challenge for my college to retain I-BEST Program instructors.
 - My institution has adapted I-BEST to meet local community needs.
 - I-BEST courses allocate sufficient time for effective hiring strategies.
 - As I-BEST courses progress, students appear to become more optimistic about the future.
 - Most I-BEST students show little interest in learning basic skills.
 - Teaching basic skills within a career context is vital to I-BEST Program success.
 - I-BEST students discuss decisions in their lives with instructors.
 - The college actively markets the I-BEST Program.
 - I-BEST has elevated the significance of basic skills instruction campus-wide.
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- I-BEST has increased my personal contact with local employers.
 - It is difficult to collect data on the progress of I-BEST students.
 - The college provides instructors with data on effective I-BEST practices.
 - Current support services adequately meet I-BEST students' needs.
 - The college has a strategy to identify when to eliminate unneeded I-BEST programs.
 - New I-BEST Programs are approved at an appropriate pace by the WBSCTC.
 - The college routinely monitors employers to determine the needs of I-BEST Programs.
 - Student employment outcomes are used to modify course instruction.
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The findings indicate there are significant differences between the two groups. The instructors were more likely to view performance tests as the better indicator of I-BEST's effectiveness. The finding seems consistent with prior work which noted instructors' preference for non-standardized assessments because they facilitate planning instruction, and the administrators' preference for standardized tests because they aid in program accountability (Askov, Van Horn, & Carman, 1997). Although the assessment of workforce skills can be measured by standardized tests (e.g., CASAS Workforce Skills Certificates), the findings suggest instructors perceive these types of instruments as lacking the specificity required to demonstrate the program's effectiveness. The use of performance tests will be beneficial because the real-world context allows students to feel confident about the work-based skills they will use after graduation (Torraco, 2008).

Another difference found in the study addressed the perceived needs of ESL students. The findings of this research contradict earlier work which found administrators did not perceive ESL students as needing additional support (Gray, Rolph, & Melamid, 1996). In the current study, I-BEST administrators were more inclined than instructors to perceive ESL students as needing additional support services beyond current levels. The finding may be a result of lack of awareness on the part of instructors since most of them do not work with ESL students and have no way of knowing what additional supports they may need. The administrators' awareness of the ESL students' needs is significant for two reasons: first, community colleges will continue to play an important role in the lives of immigrant students (Valadez, 2000), and second, this student population is critical to the Washington State Board of Community and Technical College's strategy of meeting workforce needs (WASBCTC, 2008).

Additionally, instructors and administrators differed over the issue of the adequacy of student support services. Administrators were more inclined than I-BEST instructors to perceive the current levels of support services as inadequate. One possible explanation of this finding is the administrators, especially the program managers, are more involved with coordinating support services for the students than are the instructors. As a consequence of their knowledge of students' needs, the administrators may perceive current levels as being inadequate. Support services have played an important role in the program's success, and the perceptions of the administrators suggest the need to examine which services may be falling short so appropriate remediation steps can be taken to address students' needs.

Professional responsibilities also may help to explain another group difference. Instructors and administrators differed in their perceptions of the State Board approval process for I-BEST programs. Administrators were more likely than instructors to view the pace of program approval as appropriate. The finding seems consistent with the degree of involvement administrators have in preparing the necessary documentation for program approval. The instructors offer some input, but the process is largely administrative, and the managers and their supervisors would have a keener sense of the responsiveness of the Washington State Board of Community and Technical Colleges.

The last significant difference noted between the perceptions of administrators and instructors concerned the use of student employment outcomes to modify instruction. Instructors were more likely than the administrators to agree that student employment outcomes were routinely used to modify instruction. The finding seems consistent with respect to the roles each group has within the institution. The instructors, especially vocational instructors, appear to interact to a greater degree with employers as well as former students; additionally, through professional and social networks, instructors may be gaining insights into the effectiveness of the training program. The findings of the current study suggest the I-BEST Program is heeding the recommendations of Deil-Amen and Rosenbaum (2004) among others to strengthen ties between the colleges and area employers, and to obtain data for decisions concerning the program future directly from employers.

Table 4***Summary of Significant Differences: I-BEST Instructors and Administrators***

Survey Item	<i>p</i>
Performance tests, rather than standardized tests should be used to assess I-BEST Program effectiveness	.05*
ESL students who are in the I-BEST Program do not require support services beyond those already provided	.00**
It is difficult to collect data on the progress of I-BEST students	.01*
Current levels of Student Support Services adequately meet I-BEST students' needs	.00**
The pace at which new I-BEST Programs are approved by the State Board is appropriate	.00**
Student employment outcomes are routinely used to modify course instruction	.04*

Note. * $p \leq .05$. ** $p \leq .01$.

Rural and Non-rural Perceptions of I-BEST

The study also investigated potential differences in the perceptions of I-BEST instructors and administrators located at community colleges in rural and non-rural areas. Instructors differed in their perceptions of the provision of institutional data for effective teaching practices. Rural instructors were more likely than non-rural instructors to respond that their institutions provided this type of information. Rural institutions tend to be smaller than the non-rural colleges which would increase the likelihood of face-to-face communication between implementers. The increased frequency of informal meetings may facilitate the knowledge gained from the successes and failures of others at the institution. Regardless of how information is exchanged, the findings indicate that rural practitioners are more engaged in data transmission throughout the hierarchical structure of the college than their non-rural counterparts.

According to the findings of this study, rural administrators were more likely to perceive I-BEST students as showing little interest in learning basic skills. Furthermore, as indicated in Table 5, rural administrators were more likely to disagree there was a sufficient amount of classroom time being spent on teaching effective hiring strategies.

The findings seems consistent with prior research (Cavan, 1995) which noted the important economic role community colleges can play in overcoming the challenges of high unemployment and low job growth in rural areas. The findings also suggest rural administrators are aware of the large earnings and education disparities which often exist between the rural and non-rural areas.

Rural administrators may be more acutely aware of the need to have students develop employment acquisition skills because of the limited opportunities available to them in their communities. The responses of the rural participants in this research may reflect the urgency they see in their communities to gain meaningful employment. While the rural administrators' perceptions may reflect those of their communities, they should be careful about being short-sighted in not instilling the basic skills all adults need for long-term employability and career advancement.

Table 5
Summary of Significant Differences: Rural and Non-Rural Instructors and Program Managers

Survey Item	<i>p</i>
Instructors	
I-BEST instructors receive sufficient release time for their courses	.00**
The college provides instructors with institutional data on effective I-BEST practices	.05*
Program Managers	
Most I-BEST students show little interest in learning basic skills	.02*
The current level of Student Support Services adequately meets I-BEST students' needs	.01**

Note. * $p \leq .05$. ** $p \leq .01$.

Implications

As the I-BEST program evolves, the findings of this study may be helpful to decision-makers and practitioners who guide and deliver the program. For example, the findings indicate instructor and administrator differences regarding student support services. Administrators were more likely than instructors to view services as inadequate. Not all students will seek out services on their own or come to the attention of an administrator who could connect them to the appropriate agency. A more proactive role

on the part of instructors is required to insure students get the support services they need. The failure of some instructors to monitor and follow-up on the adequacy of services increases the likelihood of challenging problems going undetected and students leaving the program. The presence of two instructors in the classroom should significantly increase the opportunities to assist and guide students who may be experiencing a particularly difficult time in the classroom - or in their lives - and who could benefit from additional attention. The findings of the study suggest some I-BEST instructors do not fully appreciate the struggles many of their students face in returning to school. All I-BEST administrators and faculty members should be trained in the principles of adult education to ensure adequate support is being provided to their students. Implementing this suggestion would not add significant additional expense to the program but could have a profound effect on students.

Although group differences may be inevitable, communication and support should be maintained for program success. Some inexperienced I-BEST instructors may perceive a lack of administrative support concerning the working conditions for front-line personnel in the I-BEST program; they may opt to leave the college rather than tolerate a situation they view as unacceptable (Ruhland, 2001). Senior instructors could choose to return to their regular classes, leaving I-BEST staffed with less experienced part-time instructors. Prior research indicates newer instructors may be less effective with basic skills students (Fitzgerald & Young, 1997). The departure of one or both of the I-BEST instructors may result in the frequent shuffling of classroom instructors. The lack of stability with the instructors could inhibit the collaborative experience which needs time to develop. Administrators and instructors will need to maintain open and honest communication channels so each side becomes aware when working conditions are too demanding and extra release time needs to be appropriated.

Open communication extends beyond the relationships between administrators and instructors. Within the administrative hierarchy itself it is imperative the managers and their supervisors maintain an open dialogue to avoid problems. One potential point of conflict between managers and their supervisors concerned the data collection on I-BEST students. The program managers were more likely than their supervisors to report finding it difficult to collect data in addition to their other duties. The key for administrators and senior-level decision makers is to narrow the needed data set so managers do not become overwhelmed. The data collection process should not become burdensome and defeat the purpose for which it is intended: to improve program performance. Careful and consistent data collection procedures should be employed to provide college decision-makers with accurate and relevant data.

Finally, the findings reflect the tensions which exist in short-term expediency and long-term regional prosperity. The perception of rural administrators that students are less interested in learning basic skills may have long-term economic implications for rural areas. Rural administrators are accurately assessing the desires of their students to immediately acquire a job, and of their area employers' needs for workers. While gaining employment is certainly essential, it underestimates the importance basic skills provide in

laying the foundation students need to continue to acquire new knowledge and to become life-long learners with skills which can be transferred from one job to another.

Recommendations

The findings of this study point to areas which the Washington State Board of Community and Technical Colleges and community college leaders should modify to enhance the program. I-BEST is a relatively new and evolving program so implementing recommendations may be easier to facilitate than if it were a long-standing program with rigid policies. One of the challenges for State Board and senior administrators will be to make data management easier by keeping targeted indicators to a minimum. Administrators could, for example, track student employment outcomes for a minimum of six months after completing training; this type of longitudinal data on student employment and promotion rates would be very beneficial.

Employment data are also useful tools in marketing the program to prospective students whose primary goal is to increase their standard of living. Employment information could also be used to market the program to elected officials and community leaders as evidence of an educational program which is working and should be supported. There may be certain employment indicators which are more practical and effective than others. For example, officials may find it burdensome to monitor graduates' wages because salaries could fall as a function of the broader market rather than I-BEST program effectiveness. Nevertheless, these indicators should be followed so valid and reliable data will be available for further evaluation of the I-BEST program.

Additionally, local program administrators need to insure their programs promote the skills necessary for life-long career enhancement. They need skills such as continuous learning and problem solving, rather than merely job-specific abilities, even when short-term goals may be a student's primary focus (Torraco, 2008). I-BEST Program leaders need to help students understand that the mere acquisition of a specific set of job skills fails to acknowledge the rapidity with which the workplace is changing, leaving an employee vulnerable to layoffs. Students should understand their potential to profit from future education to avoid "skills obsolescence" (Van Loo, De Grip, & De Steur, 2001). In the long run, strengthening students' basic skills will allow them to move up the career ladder, thus expanding their personal prosperity and the regional economy.

The Washington State Board of Community and Technical Colleges and individual college leaders need to insure I-BEST implementers are clear on when programs should be terminated. Every college should have a clear policy in place and follow-through to eliminate unneeded programs. There may be reluctance on the part of some implementers to actively monitor the marketplace. For example, vocational instructors may fear seeing their programs cut because of market saturation in a particular career field. Many programs will be able to adapt to market demands by offering more advanced training but this may not be true in all cases. Nevertheless, in the long run it is to the colleges' advantage to retain only those programs where there is a clear demand or a real potential for future demand, because this will help to establish trust with key

stakeholders such as the students in the I-BEST program and those who employ them. This initiative will enhance the credibility of the I-BEST program.

Students will be more inclined to return to the community college for their future educational needs if they have had a positive educational experience. Colleges can help insure this by offering programs with a future after course completion. It is disingenuous for the colleges to promote programs to students for non-existent jobs (Hull, Jury, & Zacher, 2007; Valadez, 2000). Like students, area employers want the college to provide maximum benefits in a changing economy. Many employers rely on the colleges to provide training to their employees so they can remain competitive. Community colleges can assure the loyalty of these important clients only if they are willing to change with the demands of the market.

One of the exciting qualities of I-BEST is its ability to adapt. Many of those participating in this study indicated they had adapted the program to fit their local needs. The program's ability to adjust to local circumstances will help to ensure its long term viability as an important tool in meeting the state's educational requirements. I-BEST's adaptability will be put to the test because the era of reduced governmental support for college programs is likely to continue. The community colleges may need to operate the program with smaller budgets. Decision makers may consider operating some courses with only a career-vocational instructor who could also provide basic skills instruction. There is no doubt this situation would put pressure on the students and the instructor, but accommodations within the curriculum could be made to make these changes feasible. Modifying the required presence of both a basic skills instructor and a career-vocational instructor may be one way to keep program costs under control.

As indicated in Table 2, nearly all the respondents to the survey identified their ethnicity as white. Interestingly, none of the participants identified their ethnicity as Hispanic. I-BEST should begin increasing the level of diversity among the instructors and administrators in the program. The Office of Financial Management (2009) reported as of April 2008 that Hispanics comprised approximately 9.32% of the population, which ranks Washington 13th out of all the states in the number of Hispanic/Latino citizens. Since the Hispanic population is an increasingly important non-dominant group it would be prudent to increase their representation in the program. For most basic skills students, returning to an educational environment can be intimidating. They may look to I-BEST implementers as role models or mentors. One of the findings of this study which is supported by prior research (Campbell & Campbell, 2007) is that mentors and students who have similar ethnic backgrounds are better-positioned for long-term success; the mentor can recognize the challenges minority students face, develop effective employment strategies based on experience, and create opportunities for greater student success among people from non-dominant groups in society. Increasing the level of diversity among instructors and administrators should be a top priority for college leaders, as the program reaches more students of diverse backgrounds.

A final recommendation concerns the issue of marketing. When the respondents were asked whether their institutions actively marketed the program, the vast majority

affirmed they did. There certainly is evidence of growth in the program because the State Board reported the fall 2009 enrollment for I-BEST increased by approximately 27.5% over the previous year (WASBCTC, 2008). Although the percentage increase is impressive, it still represents a small number of students being served in basic skills training. Aggressive marketing, based on data, will ensure the growth of the I-BEST program.

Conclusion

Senior-level leaders of the I-BEST program should be pleased it has been so well received by students and the personnel asked to implement it. Although this study found some significant differences between the various groups, there was far more congruence than divergence in the participants' perceptions of the I-BEST program. Perhaps most importantly, the I-BEST implementers in this study appear satisfied with the level of support they receive from senior leaders which is essential for the program to flourish. I-BEST program leaders are providing adequate support, but the findings of the current study indicate they need to address two important issues: implementers need to be more fully engaged in I-BEST, and institutions need to increase the level of diversity among instructors and administrators in the program.

The findings suggest administrators and instructors are not fully engaged in the program. For example, leaders have failed to clearly articulate termination policies and procedures for unneeded programs. Furthermore, many respondents appeared to lack knowledge on critical issues such as the monitoring of employer demands for I-BEST programs. Implementers must be more fully engaged in the entire process which involves everything from alerting administrators on terminating moribund programs to establishing ties to employers in their communities. An increased level of engagement at all levels of the institution will be required as I-BEST expands.

Leaders should insist their institutions have greater diversity in the I-BEST program. The findings of this research show a general lack of diversity among the implementers of the program. Minority students could benefit from having mentors and role models who share their ethnicity. Moreover, minority-owned businesses may be more inclined to forge bonds with the college if approached by an implementer who is also a member of a minority group. The rapid expansion of people from non-dominant groups within the State of Washington makes increasing the number of instructors, administrators, and participants from minority groups a priority for college leaders.

The I-BEST program appears to be an adaptive program capable of handling the demands of different communities and stakeholders. The participants from rural colleges in this study expressed they have shaped the program so it best serves their specific needs. The rural colleges have shown I-BEST to be an adaptable program capable of meeting the challenges which come from serving in areas with limited resources. The lessons these colleges have learned could assist everyone. College leaders should encourage greater communication between institutions so the hard-earned lessons of one college do not have to be repeated by others. The learning process will go smoother if institutions can draw on the collective experience of other I-BEST programs.

The current study has attempted to give I-BEST implementers a voice which had not previously been reported. As additional studies are performed, further insights into instructors' and administrators' experiences will be uncovered. This is the first step in a long journey. Hopefully the findings of this study will be useful to college leaders as they reach out to greater numbers of adults who need basic skills and present an educational program which can transform their lives.

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