
Business Education Roundtable Discussion Groups | Report of Findings

Prepared for **THE COLORADO EDUCATION ALIGNMENT COUNCIL**

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EXECUTIVE SUMMARY

I. BACKGROUND

By executive order on October 4, 2005, Governor Bill Owens established the Colorado Education Alignment Council to develop recommendations that ensure high school graduates are adequately prepared for entrance into the postsecondary education system or the workforce.

The executive order:

- A. Charged the Alignment Council with aligning and creating a system of K-16 standards that “will require secondary and post-secondary leaders, as well as the business community, to define clearly the knowledge and skills necessary to be successful at each level of education and eventually in the workforce”;
- B. Charged the higher education and workforce communities with outlining “what they expect high school diploma recipients to know and be able to demonstrate for formalized post secondary coursework or entry into the workforce”; and
- C. Instructed the Alignment Council to convene experts in all levels of education, as well as employers, to “define, write and establish standards for high school graduation across the State.”

Comprised of 30 members representing the education and business communities, and staffed by the Fund for Colorado’s Future (the Fund), the Alignment Council will submit its recommendations to Governor Owens by October 1, 2006.

II. IDENTIFYING WORKFORCE COMMUNITY EXPECTATIONS

The Fund retained Walt Klein Advertising (WKA) to gather input from Colorado’s workforce community on what employers expect high school graduates to know and be able to demonstrate for entry into the workforce. WKA convened groups of business leaders in roundtable discussions around the state to:

- A. Identify specific skills business leaders seek in both entry-level and high-skill employees;
- B. Identify gaps between the workforce needs and the skill sets of potential employees; and
- C. Identify solutions for closing those gaps.

III. SUMMARY OF FINDINGS

WKA partnered with local Chambers of Commerce to identify, recruit and host six roundtable discussions with business leaders representing a broad cross-section of Colorado employers. These employers represented industries most prevalent in Colorado and/or expected to be in high demand for Colorado in the next 10 to 20 years. Employers who attended the discussions represented tens-of-thousands of entry-level and high-skill employees across the state.

Local Chambers of Commerce in Colorado Springs, Fort Collins, Grand Junction, Greeley, Pueblo and Denver hosted roundtable discussions during March and April 2006.

WKA used a guided discussion format in each location. The format included a series of open-ended questions and ranking exercises, in which business leaders responded to and ranked a series of education statements and specific workplace skills. The following key findings are based on both the discussion and ranking exercises.

III. SUMMARY OF FINDINGS (CONT.)

A. Education is a major concern for employers.

When asked to identify the biggest issue facing Colorado, 26 percent of the business leaders said education. Education-related issues were cited more than any other issue, including corporate taxes, employment, economy, budget, growth, and transportation. However, the definition of the education concern did vary by individual.

Below are verbatim comments from participants:



“Lack of education reform, therefore causing too many dropouts. I think that [the] key is to strike at the root of the problem rather than the result of the problem... We need to get the kids out of high school before we can get them into college.”

– Manufacturing & Engineering, Denver

“Resources for higher education. Specifically, I have a major concern about the state universities supplying avenues for careers.”

– Healthcare, Fort Collins

“You have to have a good education system in order to attract anybody here.”

– Industry N/A, Grand Junction

“Take...the call center industry. For a fraction of what I can hire here in the States and get an entry-level person, I can get a person with a doctor’s degree in India... Education’s a lifestyle, it’s not a choice... We don’t have that culture in our country about education.”

– Call Center, Pueblo



B. There is an “alignment” problem across the state, because graduates are not ready to be effective members of the workforce.

Business leaders in each region of the state came to the same conclusions -- the skills and work-readiness of high school graduates do not match up with the needs of Colorado’s workforce. This was especially evident in how participants responded various statements about education. Statements included facts from local and national research, such as:

- There are no statewide Colorado high school graduation requirements;
- High school graduates arrive at college and work with gaps in preparation;
- 46 percent of high school graduates believe they are not prepared to meet employer expectations;
- 45 percent of employers say high school graduates are not prepared to move beyond entry-level jobs; and
- 30 percent of Colorado students need remediation upon entering college.

Business leaders ranked their concern over these particular statements between an 8 and a 9 out of a possible 10 (where 1=not concerned and 10=very concerned).

III. SUMMARY OF FINDINGS (CONT.)

B. There is an “alignment” problem across the state... (Cont.)

Verbatims:



“I think there continues to be a disconnect between educators and what’s actually happening in businesses.”
– Tourism/Hospitality, Colorado Springs

“The expectations aren’t aligned with the resources.”
– Insurance, Fort Collins

“What’s out there and what we need sometimes are not a match, and what’s happening is a lot of employers are having to spend a lot of money training, and that’s very expensive.”
– Recruiting, Denver

“[There is a] lack of integration between, for example, workforce development and workforce goals of the state and education pre-K through higher ed.”
– Law Firm, Denver



C. The “hard” skills are seen as lacking high school graduates.

Employers were very specific defining the so-called “hard” skills lacking in entry-level employees, including examples of poor basic math, grammar, presentation, and oral skills. Employers cited these as daily skills needed to succeed.

Further illustrating this attitude was the following education statement that most concerned employers:

- More than 60 percent of employers rate high school graduates’ skills in grammar, spelling, writing and basic math as “fair” or “poor”.

They ranked this statement as a 9 out of a possible 10 (where 1=not concerned and 10=very concerned).

Finally, when asked for solutions to fix the state’s alignment problem, the second most suggested solution was “stronger basics,” as identified by 14 percent of the participants.

Verbatims:



“What they’re finding [corporate site selectors looking at Northern Colorado] is the workforce that they’re looking to attract [in Colorado] is not proficient in ninth grade language arts and fifth grade math.”
– Financial Services, Fort Collins

III. SUMMARY OF FINDINGS (CONT.)

C. The “hard” skills are seen as lacking high school graduates. (Cont.)

Verbatims:

“Kids that aren’t going to college sort of get left behind in terms of their high school training and are not getting the skills necessary to join the workforce, particularly in basic areas of oral and written communication skills — just being able to articulate themselves in an interview, being able to execute from a writing standpoint, being able to communicate appropriately in the workforce out of high school.”

– Insurance, Colorado Springs

“We’re pretty computer-heavy in my particular business. I mean, if you don’t know Excel and PowerPoint, you’re kind of lost. You’ve got to know that going in.”

– Tourism, Grand Junction

“Most can’t read critically...They’ll take a newspaper headline at face value and not understand why the editor decided to put that headline on...and not understand how often it is incorrect. They can’t write very well, and that goes a little bit hand-in-hand with not being able to read critically. They have poor verbal communication skills in terms of conveying information clearly and cleanly so that people can act on it.”

– Financial Services, Denver



D. High school graduates are not ready for the workforce.

When asked how well our schools are doing at preparing high school graduates to enter the workforce right out of college, business leaders gave this statement the lowest score of four statements, rating it a 3.6 out of a possible 10 (where 1=poor job and 10=excellent job). Many employers had specific examples of high school graduates they’ve interviewed or hired who don’t have the skills necessary to succeed in the workforce.

Verbatims:



“Graduates...are exiting with unrealistic expectations of what their skills need to be in the workplace to be successful.”

– Tourism/Hospitality, Colorado Springs

“We use a temporary service to bring in most of our entry level types of folks, and today they are struggling badly to find individuals that can get through the criteria that we define. Some of the numbers I have seen from them is it’s well over 100 folks they go through to get us six or seven.”

– Manufacturing, Pueblo

“We typically don’t hire a lot of folks coming straight out of high school. They’re simply not prepared; they’re not mature enough to handle a simple phone call. They can pass an assessment, but doing the actual work, it hasn’t proven well for us.”

– Healthcare, Denver

III. SUMMARY OF FINDINGS (CONT.)

D. High school graduates are not ready for the workforce. (Cont.)

Verbatims:

“Probably the most amount of responsibility in our jobs and have the highest potential for salaries are superintendents. Typically, our superintendents come up from high school and work that route... We have a real problem right now trying to fill those positions.”

– Construction, Denver

“We hire a lot of people with only high school degrees. 75 or 80 percent of our employees don’t have advanced degrees... what we see is that we have trouble finding what we need out of that group.”

– Communications, Denver

E. High school graduates are seen as slightly better prepared for college than the workforce.

When asked to compare high school graduates’ preparedness for the workforce versus college, college came out ahead, but not by much. Business leaders gave our schools a 5.1 out of 10 for this statement (where 1=doing a poor job and 10=doing an excellent job). Some employers had examples of both high school and college graduate entry-level employees lacking the necessary skills to succeed.

Verbatims:

“A lot of college kids fail some of the testing we do for some of the computer software that we ask. It’s pretty basic, but they do fail. So a lot of times, we send them to job service so they can get some of those skills up and they come back and retest, because they just don’t have the basics.”

– Technology, Greeley

“Our issue or challenge around soft skills goes beyond high school to include what’s also coming out of colleges today. If you look at today’s business environment and maybe the new soft skills that are required, such as collaboration or working virtual and some of those others, I think we’re challenged, whether it’s out of high school and it’s relative to age immaturity, or coming out of college.”

– Aerospace, Denver

“If you compare somebody that’s going to the workforce that’s not going to college versus somebody that’s going to college, they don’t need to be as mature because they’re going to continue with their relationship with other students...so they get four more years of maturing.”

– Industry N/A, Grand Junction

III. SUMMARY OF FINDINGS (CONT.)

F. Schools are not seen as preparing students for tomorrow's jobs.

Business leaders gave our schools a 4.7 out of a possible 10 (where 1=doing a poor job and 10=doing an excellent job) for preparing students for tomorrow's jobs. "Tomorrow's jobs" could mean different things to different companies, but in discussion around this topic most companies could talk about specific skills needed now and in the future as lacking.

Verbatims:



"In a company like Intel, they won't have the skills when they're right out of high school. It requires advanced knowledge and whether that's through a two-year or four-year degree. ...The high schools, I don't really know that that's their role to prepare kids to enter the workforce right out of high school. I think we need to set the expectation that your education is not done when you finish high school."

– Technology, Colorado Springs

"We have lacking skills in math and science and reading...I'm not sure if the school districts or the state looks bigger picture and longer term on how global we're becoming and what are the jobs of the future, and they evolve continually."

– Manufacturing/Engineering, Fort Collins

"We will never be able to compete internationally in manufacturing anymore...so we need to have a workforce that is creative, is able to design, create, build...We need people who are teaching our kids to be able to teach and think creatively and develop those skill sets. And I think we're still in an education system that's trapped or designed for a manufacturing economy, and the education system hasn't adapted to a creative economy yet. And that's where I think we need to move."

– Financial Services, Fort Collins



G. Graduates are perceived to lack the "soft" skills necessary to get a job and work effectively with others on the job.

Employers were quick to describe the basic life skills, or "soft" skills, necessary to succeed in the workplace as lacking in high school graduates. Examples included:

- Showing up to work on time;
- Dressing appropriately for an interview;
- Maintaining eye contact;
- Using appropriate conversation at work; and
- Having interpersonal skills for teamwork.

III. SUMMARY OF FINDINGS (CONT.)

G. Graduates are perceived to lack the “soft” skills necessary to get a job and work effectively with others on the job. (Cont.)

While none of the discussion exercises guided participants to rate or respond to the importance of “soft” skills, the issue was brought up in every group across the state. While this was an unexpected concern, it was so strongly expressed that it deserves serious attention.

Verbatims:



When you look at the skills that people come with to work right out of high school, we don't find basic things such as interpersonal skills, working and interacting, communication...But coming to work on time and being accountable for what your tasks are and getting them done on time, I mean, those are work ethics and capabilities as well.

– Healthcare, Fort Collins

“These kids come in and they don't even know how to look you in the eye for an interview. They are not prepared to communicate with customers, or even with their boss. They don't even understand work ethics.”

– Retail, Grand Junction

“Understanding even things like use of appropriate language in a workplace and little things like that, they need a lot of counseling on right at first.”

– Technology, Greeley

“It's a lack of the life skills that they need – personal accountability, being on time, you know, being able to have critical thinking skills and problem-solving skills, work with other people, and really having an idea of what the employers expect and what the working world is like. I think we have a lot of kids get out of high school don't have a clue...what it means to go to [a] job and go to work.”

– Construction, Pueblo



H. There is no consensus in the business community on how to fix the education problems they identified.

Across the state, business leaders were good at identifying specific problems, but not at providing consensus solutions. Opinions and ideas varied by industry, job type and even personal experience with the school system. The most common suggestions included finding ways to directly connect businesses with local school systems to give students and teachers exposure to the business world.

When asked for specific solutions:

- 29 percent of the business leaders suggested teaching a curriculum with more business and career skills;
- 12 percent identified real work experience during high school as a critical need; and
- Others suggested a focus on stronger basic skills, mandatory classes, and more emphasis on communication skills.

III. SUMMARY OF FINDINGS (CONT.)

H. There is no consensus in the business community on how to fix the education problems they identified. (Cont.)

Verbatims:



“Keep a semester at least for people to come into a workplace and have to show up every day and wear the appropriate clothing and do the job and be assessed on it. Those kinds of things would be helpful.”

– Non-Profit, Colorado Springs

“Define a work-ready curriculum that would be participative in situational learning so that they knew what to expect when they got into the workforce.”

– Manufacturing/Engineering, Fort Collins

“I think that so often...people that are involved in other things are the ones that excel and go do something. I think that ought to be integrated to a greater degree into the curriculum, because that’s what keeps kids in school, keeps them interested, and that’s what work is.”

– Communications, Denver

“We still have to expect students to come out of high school with certain levels of education, and it should be statewide...we should be expecting all of our schools to do a minimum requirement.”

– Retail, Grand Junction



IV. STUDY SUMMARY

There is clearly an alignment problem with the skills expected of even an entry-level workforce compared to the actual skills of potential employees as reported by Colorado business leaders. These key findings should be viewed as an opportunity to get the business community more involved in the local education system across the state to help close the gap on the alignment issue.

Education is top of mind, certainly with the business leaders who participated in this discussion, but also most likely with many other business leaders across the state.

Many who participated in these roundtables mentioned activities already under way in their own regions to address education alignment. Many have specific suggestions on how that would work for their region and their industry. Those who don’t have specific suggestions have an interest and a perceived willingness to get involved in any solutions presented.

As the Alignment Council moves forward with specific recommendations to address the state’s education alignment issue, consider carefully the input of the business community and continue to include them at the table as recommendations are made. Communication with and support from this community will be key in any widespread effort to make sure Colorado’s students are prepared for college and work.

V. OPPORTUNITIES PRESENTED

The Business Education Roundtable Discussion Groups identified serious concerns in the business community about how unprepared our high school graduates are to move into real jobs in the Colorado workforce. The specific concerns discussed by business leaders across the state should be viewed not as a mirror of the status quo, but rather as a reflection of great opportunities that can be realized by Colorado's students.

These will be the opportunities that could flow from tapping into the deep interest that was expressed by Colorado's business leaders. Business leaders showed a strong desire to not just talk about problems but to do some things that will make things better for our kids, our state, and our workforce. There is a reservoir of strength and energy waiting to be tapped. What is needed are more communication and more contact in the following ways:

- A. More direct communication among business leaders regarding education challenges in Colorado;**
- B. More direct communication between business leaders and schools; and**
- C. More direct student contact with businesses before graduating high school.**

These could include the following opportunities:

A. More direct communication among business leaders regarding education challenges in Colorado.

While there was intense discussion about local schools and local education in each of the regional discussion groups, there seemed to be little awareness about what was going on with businesses and schools in other parts of the state.

Specific local efforts of businesses (coordinated primarily through local Chambers of Commerce) to help the local schools were mentioned in every group. But there was no discussion of how these efforts compared to what other business might be doing in other places.

While proud of what they are doing locally, there was great interest in what might be happening elsewhere. And therein is the opportunity for a sharper focus for circulation and discussion of education information within the business community.

One way to start such a process might be to convene a statewide business summit on education, where a large group of business leaders might come together for a full day of briefings and discussion regarding the challenges facing our educators, our students, and our employers. Such a summit could identify clear long-term objectives for keeping business leaders better informed and pave the way for more effective ways to help local schools turn out graduates better prepared to move into the Colorado workforce.

B. More direct communication between business leaders and schools.

More business leaders need to find ways to spend some time in regular communication with their local schools. And more educators and school administrators need to find ways to reach out to the business community for help in meeting their challenges.

Some of the most compelling comments in the discussion groups were based on first-hand experiences as parents of students - not direct observations or contact with local schools or educators. There was a lot of talk about what people had read or heard from others and what they knew from their own children's experiences. There was little evidence that the business leaders had spent much time in local schools or classrooms.

V. OPPORTUNITIES PRESENTED (CONT.)

B. More direct communication between business leaders and schools. (Cont.)

And there is the opportunity. If business leaders have more direct contact with local school educators and administrators, communication will improve, and so will the effectiveness of the business leaders' commitment.

A recent event in Pueblo points out the promise.

Local School Districts, Colleges and the Pueblo Education Consortium sponsored a two-day Math Leadership Institute. The objective: how to make what they teach match up with the needs of employers and the requirements of colleges.

One of the most important presentations was from two local businessmen who had participated in the Pueblo Roundtable Discussion. On this day, they were explaining to local educators the specific job tasks and skill sets (with the emphasis on math) required for people looking for jobs in their local companies right out of high school. They also touched on the previously mentioned lack of "soft" skills in the job applicants they see.

The rapt attention and pointed questions of the educators in the audience made it clear that there was a real learning experience taking place as the employers were talking directly with those charged with getting students ready to be successful candidates for jobs in their local economy. If that kind of exchange is regularly repeated in every community in Colorado, our students' skills and our employers' expectations will match up much better in the long run.

C. More direct student contact with business before high school graduation.

Just as business leaders would benefit from spending time in local schools, so would students benefit from more direct contact with businesses. This thought was expressed in all of the groups, sometimes as a statement and sometimes raised as a question. It underscores the opportunity for getting students better prepared for the workforce.

Business leaders complained that too many high school graduates don't understand how business works. A few employers discussed programs that bring local students inside their business before graduation. But for most of the Roundtable participants, it was just a really good idea that makes sense.

The doors of businesses are wide open for additional programs that will give students real exposure to real businesses before the students enter the workforce. Since employers have such apparent enthusiasm for the general concept of business work/study programs, it may be one of the best opportunities to take advantage of immediately.

FINDINGS DETAILED

I. HOW BUSINESS LEADERS WERE RECRUITED

Local Chambers of Commerce helped recruit business leaders from industry sectors most prevalent in Colorado and/or projected to be in high demand for Colorado in the next 10 to 20 years. Also included in the recruiting categories were industry clusters identified by the Metro Denver Economic Development Corporation as targets for economic development and expansion efforts.

Industries targeted included, but were not limited to:

- Agriculture
- Business/Professional Services
- Communications
- Construction/Development
- Energy
- Financial Services
- Health Care
- Manufacturing
- Non-Profit
- Retail/Wholesale
- Technology:
 - Aerospace
 - Biotechnology
 - Engineering
 - Software/Hardware
- Tourism/Hospitality

Local Chambers of Commerce in the following cities hosted roundtable discussions:

- Colorado Springs – March 16, 2006
- Fort Collins – March 23, 2006
- Grand Junction – March 24, 2006
- Greeley – April 4, 2006
- Pueblo – April 5, 2006
- Denver – April 7, 2006

FINDINGS DETAILED

I. HOW BUSINESS LEADERS WERE RECRUITED

The Colorado companies whose business leaders participated in the roundtable discussions included:

- American National Bank
- M.A. Lang & Associates
- Univision
- Express Scripts
- Comcast
- Bassett Construction Co.
- Guaranty Bank & Trust
- Trane Company
- First Bank
- Krage Manufacturing
- Pipe Fitters Local Union
- North Colorado Medical Center
- Donelson Goodwin & Juarez, P.C.
- Asurion Lock/line
- Lockheed Martin
- Kenny's Steakhouse
- PCL Construction
- State Farm Insurance
- U.S. Government Accountability Office
- Flood & Peterson Insurance
- NAS Recruitment Communications
- Pacific Retail Partners
- Xcel Energy
- First Western Trust Bank
- Blue Cross Blue Shield
- Woodward
- Coors Brewing Company
- Columbine Health Systems
- United Airlines
- Focus On The Family
- Die Cut Technologies
- Intel Corporation
- City Markets
- CollaborX, Inc.
- The Broadmoor Hotel
- Wells Fargo Bank
- Hewlett Packard Company
- Progressive Insurance

The range of business leadership varied from C-level executives to directors and managers in various departments of companies. All who participated had hiring responsibility and/or experience.

Business leaders who were unable to attend received response packages that included a description of the project and a request to complete a detailed workplace tasks survey, provide samples of workplace tasks, and complete other exercises that were used with participants in the discussion groups.

FINDINGS DETAILED

II. METHODOLOGY

Business leaders were asked to participate in a two-hour discussion at their local Chamber of Commerce. All participants were given some background on the Alignment Council's effort and knew they were being asked to provide their input on education from a business leader's perspective.

Many recruited are currently involved and/or highly interested in education issues in their local areas. However, participants were not recruited because they are experts in education. They were recruited to talk about education from their own perspective as an employer having to hire from a pool of employees educated in Colorado.

Walt Klein, CEO of Walt Klein Advertising, moderated the discussions. All discussions were video-recorded for transcription purposes and followed the same general flow with these key exercises:

A. Top-of-Mind Discussion

A guided discussion began with an exercise to identify business leaders' top-of-mind concerns. Participants were asked to respond with quick answers to questions such as, "What issues are important for the health of Colorado's economy?" and "How are our K-12 schools doing?".

B. Respond to Statements About Education

Participants were then asked to read ten statements about education, drawn from national and local research data, and rate them according to how concerned businesses should be about each statement. The purpose was to give business leaders ideas and issues to respond to, instead of having an open-ended brainstorming session. The exercise helped guide the discussion, define key issues important to business, and identify which messages catch employers' attention when talking about education.

C. Rate Entry-Level Skills Required

Participants also read through descriptions of ten different skills and were asked to rate the importance of each for an entry-level employee in their own organizations. The ten skills were taken from Achieve, Inc.'s American Diploma Project, which through national research identifies key high school benchmark skills necessary for success in college and the workforce. The ten Achieve benchmark skills chosen for this exercise (five English and five math) are skills missing in the Colorado Model Content Standards.

D. Take-Home Assignments

Finally, participants were given a take-home assignment: Complete a detailed survey of English and math skills necessary for both entry-level and high-skill jobs in their companies, and return the surveys to the Fund with a sample of work product for each job. Survey results and work product would later be analyzed and reviewed by education content experts for recommendations on how to turn the most required business skills into high school coursework standards.

A sample of the discussion exercises can be found in the Appendix of this report.

III. RESULTS

A. Top-of-Mind Discussion

1. What’s the biggest issue facing Colorado today?

When asked what the most important issue facing the state of Colorado today is, the average responses from the business community were:

- 26% Education**
- 17% Employment / workforce development
- 14% Growth / infrastructure / transportation
- 14% Economy / budget
- 9% Water

2. What’s most important to Colorado business today?

When asked to rate the following statements for how important they are to Colorado business today (where 1=not important and 10=very important), education stood out on top as the most important issue.

AVG. RATING	STATEMENT
8.8	Improve the quality of education in Colorado from pre-school through college.
7.6	Offer tax incentives to recruit corporations to relocate to Colorado.
5.3	Lower the income tax rate corporations pay in Colorado.

III. RESULTS (CONT.)

A. Top-of-Mind Discussion (Cont.)

3. How well are Colorado schools doing?

When asked to rate the following statements based on how well business leaders think our K-12 schools are doing to prepare students (where 1=poor job and 10=excellent job), preparing students to enter the workforce received the lowest marks. None of the statements scored much higher than a middle-of-the-road score of 5 out of 10.

AVG. RATING	STATEMENT
3.6	Preparing high school graduates to enter the workforce right out of high school.
4.7	Providing the education that today’s students will need for tomorrow’s jobs and careers.
5.1	Preparing high school graduates to enter college right out of high school.
5.4	Teaching students the basic academic subjects like reading, writing and math.

4. How would you suggest schools better prepare students for work?

In open-ended questioning, business leaders were asked for solutions to better prepare high school graduates for the workforce. No single solution stood out, but several suggestions were offered, including:

- 29% More business / career / vocational skills**
- 14% Stronger basics
- 12% “Real work” experience for students
- 9% Mandatory classes through final semester
- 5% More speech / communication / English skills
- 5% More computer / technology skills

III. RESULTS (CONT.)

B. Responses to Statements About Education

Participants were asked to rate ten statements according to how concerning each statement should be to Colorado businesses (where 1=not concerned and 10=very concerned). After rating all statements, participants were asked to identify the top three most concerning statements, marked in order by an A, B and C.

AVG. RATING	STATEMENT	MOST CONCERNING STATEMENTS
9.0	More than 60 percent of employers rate high school graduates' skills in grammar, spelling, writing and basic math as "fair" or "poor".	A
8.9	For every 100 Colorado ninth grade students only 70 graduate from high school and only 20 graduate from college.	B
8.6	Colorado has no statewide high school graduation requirements.	
8.4	Too many high school graduates now arrive at college or in the workplace with major gaps in their preparation.	
8.4	46 percent of recent high school graduates who entered the workforce believe they are not adequately prepared to meet all the expectations of their employers.	
8.4	Most students who attend college never attain a degree. Lack of adequate preparation in high school is the greatest predictor of who won't get a degree, more so than family income or race.	
8.3	A survey of national employers reveals that 45 percent of recent high school graduates are not prepared to move beyond low-wage, low-skill, entry-level jobs.	C
8.2	Thirty percent of all high school students entering college in Colorado need remedial education help, at a cost of \$10.5 million per year.	
7.9	72 percent of high school graduates who did not go to college say knowing what they know today about the expectations of college and the work world they would have taken more challenging courses.	
6.6	Colorado tests for statewide standards through grade 10.	

III. RESULTS (CONT.)

B. Responses to Statements About Education (Cont.)

All ten statements rated above a 6, meaning they are all somewhat to very concerning to business leaders. Of the statements reviewed, however, participants determined Colorado businesses should be most concerned about the following statements:

A. More than 60 percent of employers rate high school graduates' skills in grammar, spelling, writing and basic math as "fair" or "poor".

Most participants around the table had very specific examples of basic skills lacking in entry-level employees, whether they were just out of high school or not.

B. For every 100 Colorado ninth grade students only 70 graduate from high school and only 20 graduate from college.

This was a shocking figure for most business leaders, and for many it was the first time they had seen it.

C. A survey of national employers reveals that 45 percent of recent high school graduates are not prepared to move beyond low-wage, low-skill, entry-level jobs.

Colorado employers can relate to this fact, and it confirmed earlier discussions about employers' personal experience with the lack of preparedness of entry-level employees.

III. RESULTS (CONT.)

C. Responses to Entry-Level Skills Required

Participants were asked to rate the following ten potential skills based on how essential the skill is to an entry-level employee in their organization (where 1=not essential and 10=very essential). After rating all skills, participants were asked to identify the top three most essential skills, marked in order by an A, B and C.

AVG. RATING	STATEMENT	MOST CONCERNING STATEMENTS
8.4	Follow instructions in informational or technical texts to perform specific tasks, answer questions or solve problems.	A
8.2	Participate productively in self-directed work teams for a particular purpose. For example, to interpret literature, write or critique a proposal, solve a problem, make a decision.	B
8.1	Using inductive and deductive reasoning to arrive at valid conclusions.	
7.8	When solving problems, thinking ahead about strategy, testing ideas with special cases, trying different approaches, checking for errors and reasonableness of solutions as a regular part of routine work, and devising independent ways to verify results.	C
7.3	Interpret and use information in maps, charts, graphs, time-lines, tables and diagrams.	
6.8	Present written material using basic software programs such as Word, Excel and Power-Point and graphics such as charts, ratios and tables to present information and ideas best understood visually.	
6.4	Determine whether, when, and how to employ technologies such as computer software, photographs and video in lieu of, or in addition to, written communication.	
5.8	Recognize and solve problems that can be modeled using a finite geometric series, such as home mortgage problems and other compound interest problems.	
5.5	Recognize and solve problems that can be modeled using a system of two equations in two variables, such as mixture problems.	
5.1	Evaluate reports based on data published in the media by considering the source of the data, the design of the study, and the way the data are analyzed and displayed.	

III. RESULTS (CONT.)

C. Responses to Entry-Level Skills Required (Cont.)

All potential skills reviewed ranked above a 5 indicating that business leaders identified all as moderately to very essential to an entry-level job in their organization. Of the skills reviewed, however, business leaders determined the following skills as most essential for success in an entry-level job:

- A. Follow instructions in informational or technical texts to perform specific tasks, answer questions or solve problems.**
- B. Participate productively in self-directed work teams for a particular purpose. For example, to interpret literature, write or critique a proposal, solve a problem, make a decision.**
- C. When solving problems, thinking ahead about strategy, testing ideas with special cases, trying different approaches, checking for errors and reasonableness of solutions as a regular part of routine work, and devising independent ways to verify results.**

Following instructions, solving problems, working in teams, making decisions, all stood out as key skills essential for entry-level employees. When prompted, business leaders from manufacturing to communications to high tech to banking could give specific examples of how these specific skills play an important role in their companies.

D. Take-Home Assignments

Business leaders who attended the discussions took home an assignment to complete a detailed survey of English and math skills essential to both entry-level and high-skill jobs in their companies. These skills represented Achieve's national benchmark standards that signify readiness for college and work. The same take-home assignments were sent to those business leaders who were invited to, but could not attend, the discussion.

The surveys were returned to and analyzed by the Fund in July 2006. The Fund summarized the results in a presentation to the Alignment Council on July 11, 2006, titled "Business Input on Standards". The Fund's summary of findings included these observations and recommendations:

1. Employers consider many of the academic standards developed by Achieve, Inc. that are omitted from the Colorado Model Content Standards to be essential to the success of all employees;
2. Employers consider nearly 90 percent of the academic standards developed by Achieve, Inc. that are omitted from the Colorado Model Content Standards to be essential to the success high-skilled employees; and
3. The Colorado Model Content Standards for grades 9-12 should be revised to include those standards that are essential to the success of high-skilled employees.

The Fund will include a detailed summary of findings in its final recommendations report in October 2006.

APPENDIX

I. About Walt Klein Advertising

Walt Klein Advertising is a Denver-based advertising, marketing and public affairs agency with more than 25 years of research, branding, media, and communications experience in Colorado and across the nation.

II. Appendix Items

Education Statements Ranking Exercise

Skills Ranking Exercise

Top-of-Mind Exercise

Take Home Assignment Request

Sheet #1 Statements About Education

Company _____
 Contact _____

Statements That Have Been Made About Education

Following is a list of statements that have been made about education. For each statement, please rank, on a scale of 1 to 10, how concerned businesses in Colorado should be about the statement. Where 1 means that business should not be at all concerned and 10 means that business should be very concerned about the statement.

Circle a number from 1 to 10, where 1 means Colorado businesses should not be concerned and 10 means Colorado businesses should be very concerned about the statement.

<u>Statement</u>	<i>Not Concerned</i>	<i>Very Concerned</i>								
<u>Statement</u>	<u>Ranking</u>									
1) More than 60 percent of employers rate high school graduates' skills in grammar, spelling, writing and basic math as "fair" or "poor".	1	2	3	4	5	6	7	8	9	10
2) Thirty percent of all high school students entering college in Colorado need remedial education help, at a cost of \$10.5 million per year.	1	2	3	4	5	6	7	8	9	10
3) Too many high school graduates now arrive at college or in the workplace with major gaps in their preparation.	1	2	3	4	5	6	7	8	9	10
4) Colorado tests for statewide standards through grade 10.	1	2	3	4	5	6	7	8	9	10
5) Colorado has no statewide high school graduation requirements.	1	2	3	4	5	6	7	8	9	10
6) For every 100 Colorado ninth grade students only 70 graduate from high school and only 20 graduate from college.	1	2	3	4	5	6	7	8	9	10
7) A survey of national employers reveals that 45 percent of recent high school graduates are not prepared to move beyond low-wage, low-skill, entry-level jobs.	1	2	3	4	5	6	7	8	9	10
8) 72% of high school graduates who did not go to college say knowing what they know today about the expectations of college and the work world they would have taken more challenging courses.	1	2	3	4	5	6	7	8	9	10
9) 46% of recent high school graduates who entered the workforce believe they are not adequately prepared to meet all the expectations of their employers.	1	2	3	4	5	6	7	8	9	10
10) Most students who attend college never attain a degree. Lack of adequate preparation in high school is the greatest predictor of who won't get a degree, more so than family income or race.	1	2	3	4	5	6	7	8	9	10

Sheet #2 Entry Level Skills Rating

Company _____
 Contact _____

Potential Skills of Entry Level Employees

Following is a list of skills that have been nationally identified as potentially important for successful entry into the workforce or college. Thinking of the needs of your own company and using a scale from 1 to 10, rank each skill listed below as not essential or very essential for your entry-level employees.

Circle a number from 1 to 10, where 1 means this is not an essential skill and 10 means it's a very important skill for an entry-level employee in your company.

Skill	<i>Not Essential</i>	<i>Very Essential</i>								
	Ranking									
1) Participate productively in self-directed work teams for a particular purpose. For example, to interpret literature, write or critique a proposal, solve a problem, make a decision.	1	2	3	4	5	6	7	8	9	10
2) Determine whether, when, and how to employ technologies such as computer software, photographs and video in lieu of, or in addition to, written communication.	1	2	3	4	5	6	7	8	9	10
3) Present written material using basic software programs such as Word, Excel and PowerPoint and graphics such as charts, ratios and tables to present information and ideas best understood visually.	1	2	3	4	5	6	7	8	9	10
4) Interpret and use information in maps, charts, graphs, time-lines, tables and diagrams.	1	2	3	4	5	6	7	8	9	10
5) Follow instructions in informational or technical texts to perform specific tasks, answer questions or solve problems.	1	2	3	4	5	6	7	8	9	10
6) Recognize and solve problems that can be modeled using a finite geometric series, such as home mortgage problems and other compound interest problems.	1	2	3	4	5	6	7	8	9	10
7) Recognize and solve problems that can be modeled using a system of two equations in two variables, such as mixture problems.	1	2	3	4	5	6	7	8	9	10
8) Using inductive and deductive reasoning to arrive at valid conclusions.	1	2	3	4	5	6	7	8	9	10
9) Evaluate reports based on data published in the media by considering the source of the data, the design of the study, and the way the data are analyzed and displayed.	1	2	3	4	5	6	7	8	9	10
10) When solving problems, thinking ahead about strategy, testing ideas with special cases, trying different approaches, checking for errors and reasonableness of solutions as a regular part of routine work, and devising independent ways to verify results.	1	2	3	4	5	6	7	8	9	10

Sheet #3 Top-of-Mind Exercise

Company _____
Contact _____

1. What is the biggest problem facing the state of Colorado today?

2. How would you describe the economic conditions in Colorado today? Would you say they are Excellent, Good, only Fair or Poor?

Here are several things that could be done to help make sure Colorado's economy grows and stays strong. On a scale of 1-10 how important do you think each one is for the long term health of our economy, where **1 means not important at all and 10 means very important.**

3. Lower the income tax rate corporations pay in Colorado.

1 2 3 4 5 6 7 8 9 10

4. Offer tax incentives to recruit corporations to relocate to Colorado.

1 2 3 4 5 6 7 8 9 10

5. Improve the quality of education in Colorado from pre-school through college.

1 2 3 4 5 6 7 8 9 10

Below are several jobs that are the responsibility of the K-12 school system. On a scale of 1-10, how well do you think our schools are doing in carrying out that responsibility, where **1 means a very poor job and 10 means an outstanding job.**

6. Teaching students the basic academic subjects like reading, writing and math.

1 2 3 4 5 6 7 8 9 10

7. Providing the education that today's students will need for tomorrow's jobs and careers.

1 2 3 4 5 6 7 8 9 10

8. Preparing high school graduates to enter the work force right out high school.

1 2 3 4 5 6 7 8 9 10

9. Preparing high school graduates to enter college right out of high school.

1 2 3 4 5 6 7 8 9 10

10. If you could make just one change or improvement that would make high school graduates better prepared to move into the work force right after high school, what would it be?



Colorado Education Needs Your Company's Help

Colorado education needs help from our business community.

Governor Bill Owens established the Colorado Education Alignment Council to develop recommendations that ensure high school graduates are adequately prepared for entrance into the postsecondary education system or the workforce. Comprised of 30 members representing the education and business communities, the Alignment Council is hard at work and will submit its recommendations to the Governor by October 1, 2006.

How your company can help.

There are five things your company can do to help with this important work.

1. Use the attached form to identify a critical job in your company. Choose a job that will continue to be important for your company's future. Think of the job as a typical high priority job, one that you recruit for.
2. After providing the requested information on the attached form, submit a sample job description for the position you listed.
3. Then provide a sample employee resume for each of the selected job.
4. Next, submit a sample work document that the employee filling that job must be able to comprehend. And submit a work product that the employee must be able to complete as part of their job requirement.
5. Finally, complete and submit the attached NATIONAL WORKPLACE TASK BENCHMARK survey forms for both of the entry level and high skill jobs you have listed for your company. There are surveys for both English and Math skills, so you will submit a total of four benchmark survey forms.

Please provide the contact information for someone in your company we can follow up with should we have questions about any of the information submitted. **Submit all information by May 1, 2006** to:

Daniel Furman, The Fund for Colorado's Future
475 17th St., Ste. 1040, Denver, CO 80202
daniel@Fund4Colorado.org, 303-860-0160

Note: Any information you submit will be strictly confidential. You may delete any sensitive information from the materials submitted. Names and identities may be masked.