

Skills Gaps, Skills Shortages and Skills Mismatches

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Framing the problem: assertions in popular press and business/industry studies

- ❖ Wide-spread problems in the supply of skill in the U.S.
- ❖ Reports that employers can not fill vacancies because of a *skills gap*
- ❖ Academic achievement of high-school leavers is inadequate. Failure of public K-12 system to provide students with basic skills
- ❖ Not enough college graduates in practical fields like computer science and engineering (skills shortage)
- ❖ There is a *skills mismatch*: supply of skills and demand for skills is out of synch

Skills Gap Idea

Complaint there is a systematic shortfall in skills and the decline is associated with poor skills of school leavers...schools have failed so academic performance of students has declined.



Labor Shortage Argument

Consultants asserted there would not be enough people to meet labor demand in the future.



Skills Gaps and STEM Skills

U.S. will have a shortfall of 1.5 million college graduates by 2020. Severe shortage of engineers, IT workers and other science and mathematics workers.



Consultant Reports

Much attention has been paid by major consulting firms on the skills gap or skills shortage idea.

There has been a shift in perspective as to who is responsible for keeping skills up-to-date: from employers responsibility to employees responsibility.



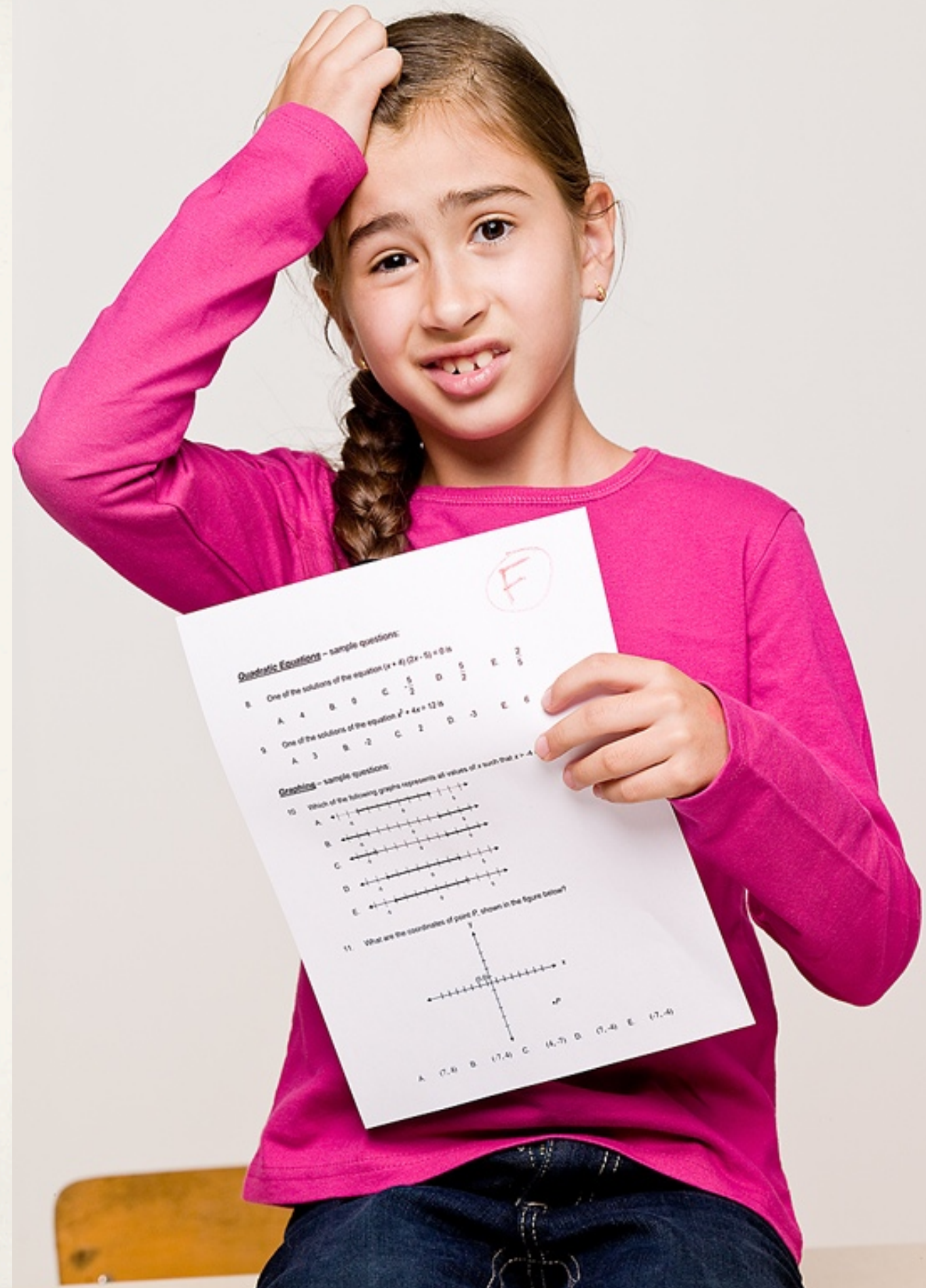
Academic Research on Skills

- There have been modest increases in “academic skills” requirements for jobs, but surprisingly small given the dramatic increase in computers, and especially given the STEM skills debate.
- No increase in science and engineering skill requirements.



Student Achievement

- The argument is that U.S. students are not learning as much as those elsewhere.



Jigsaw / Report Out / Reflections

(15 minutes read/discuss)

Group 1

The Skills Gap Idea & Labor
Shortage (pages 6-10)

Group 2

STEM SKILLS REPORT
(pages 10-14)

Group 3

Academic Research on Skills
(pages 20-25)

Group 4

Student Achievement
(pages 32-36)

Report Conclusions

- Evidence does not support the idea there are serious *skill gaps* or shortages in the workforce.
- There continues to be a *skills mismatch* where the average worker and job candidate has more education than their current job requires.
- Over qualification of skills and education is widespread and as a result increasing skills and education further is not sensible policy.
- Persistent, high levels of unemployment, reflect the fact that job seekers still outnumber available job openings.



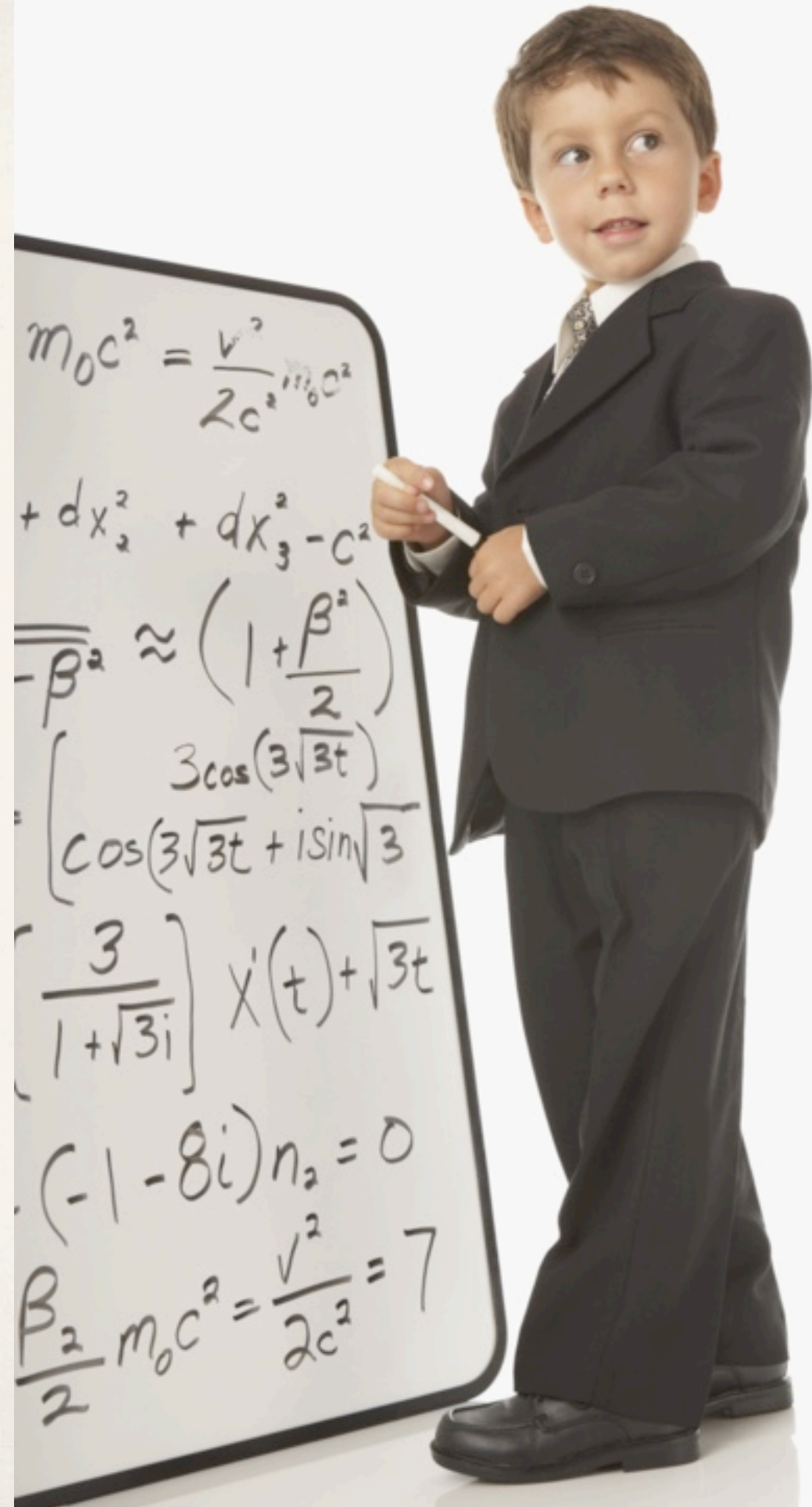
Report Conclusions

- It is unclear what the rise in employer complaints about skill problems represents because of the poor quality of information presented as part of the complaints. There needs to be more academic research.
- Some component of the complaints is simply an effort to secure policy changes that lower labor costs.



Report Conclusions

- Proposals to reduce drop-out rates and generally, increase student achievement, and generally improve the quality of secondary school education are difficult to object to.
- Having applicants with more accountability, motivation and maturity is also hard to argue with. These attributes are also typically associated with growing up.
- How schools can accelerate that process and make 18 year olds act like 28 year olds is not clear.



Report Conclusions

- There has been a shift away from employers assuming technical skill training to expecting employees and schools to assume more responsibility for technical skill attainment.
- Governments do not have a good record of forecasting where jobs will be years in advance, and students and their families bear the costs when those forecasts are wrong.
- The employers who are calling for more STEM graduates, for example, are not offering to hire the students who are now starting such programs when they graduate.



Report Conclusions

- Assuming government cannot be an effective staffing agency, are we faced with a future where employers are frustrated because they cannot find the specific skills they want to hire at the same time that job seekers cannot get the skills that employers really want because no one will give them initial work experience?



Implications for us...

- Better informed messaging from the school to students and parents about the changing world of work.
- Increased school-to-work experiences for students and staff
 - Field Trips (students and staff)
 - Job Shadowing
 - Internships
 - Co-op Programs
 - Vocational Programs
- Academic programs with a work relevant component/CTE connect
- Wide-range of learning opportunities

