The PGA ranking is likely a simple calculation based on the golfers' performance at certain tournaments (i.e. # of strokes or place in said tournament) It is probably more accurate because (a) the notion of "best" in golf is more rigorously and objectively defined than "best" colleges since games have strict win/lose outcomes and (b) it has less selection bias (colleges could be "good" but let in worse students lowering their ranking, if we define "good" to be pedagogical quality)

10/10

b) Letter grades in school are such a system, using tests as a yardstick for academic ability and effort. An advantage of testing is it allows consistent rankings and simplicity, a disadvantage is that it rewards those who can pass a test without deeper knowledge and punishes students with lower test-taking acumen. (Also year-to-year fluctuations)

10/10

EXAM
TOTAL
72

2) a) Computers are best suited at replacing lower-middle class labour of routine, information-based tasks (such as bookkeeping, drafting, etc.) and is currently ill-suited for low-wage jobs such as janitorial, agricultural or service work. Therefore I would expect computer replacement to be minimal for guest workers who predominantly occupy such jobs.

10/10

b) A high earnings gap could shift demand to lower-skilled, lower-wage work, which could theoretically increase demand for guest workers as employees with high skills are unwilling to work those jobs.
displaced workers compete w/ guest workers

7/10

3) a) Small classroom size had best performance gains in early education (STAR program) which suggests higher expenditure in reducing class size here would have a big impact. In addition Heckman one study demonstrated predictive value of ability tests on future educational attainment became high after 5 years. This implies (but doesn't necessitate) that students may be most malleable to educational investment in early years, therefore suggesting a higher ROI on such segments.
Also Perry Pre School showed this intervention can work

7/15

and IQ, and
this has
pro-social
correlatic

b) The effects of the STAR program have been contested by Hanushek. In addition the predictive value of early years aptitude on adult educational attainment could have other causal factors (smart parents, good families, high SES) and therefore actual ROI may be less. **O/5**

- Mike Anderson's research disputed Heckman
- Do 8-month old tests really measure same cognitive functions as in 4 yo.s

4) a) Not necessarily, if we knew how many computers were bought by whom. Then we could use a difference-in-difference approach to assess performance on those who got funds and misspent them, to those who got funds and bought computers. Other problems could include, if the legislation was introduced everywhere in an identical fashion (no control) or if rural performance was only known in aggregate (no labelled differentiation from schools with and without new computers) **O/10**

if we assume "opportunity" for computer use

b) I would want data on rural schools which received funding and those that did not and the relative performance of said schools over a 5-year post-intervention period. If this data is unavailable, charting the poor 5-year achievement of students who were one year too old to receive computers against one year younger during the 5-year period. (Also use diff-in-diff w/ urban/suburban **10/10**

5) a) First, the assumption is that workers and managers are honest about output. Second, that there isn't a Hawthorne (or scrutinizing) effect whereby the presence of observing researchers has a causal effect on production. If these are not held, actual productivity may be lower than reported. Second, the assumption is that managers are maximizing profit (productivity) and therefore inputs are efficiently directed to outputs. **6/6**

b) Principals and teachers may have incentives other than test maximization which distorts the input/output relationship. the implication of this is that the education production function may change radically depending on these facto **7/7**

c) Because schools are not always incentivized to maximize academic performance, models may yield distorted results, and experiments reach wrong conclusions. Teachers may want to maximize classroom ease or non-testable learni Principal's may want political favor, etc. **5/7**