Subject: economic English

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Level: Master 1/ 2

Department of Economics

**Econometrics and Education**

Econometrics is a field of economics that applies statistical methods and mathematical models to analyze economic data and test economic theories. It plays a crucial role in understanding the relationship between education and various economic outcomes, such as labor market outcomes, earnings, and socioeconomic mobility. Here's an introductory overview of econometrics and its applications in the field of education for English learners:

1. **Understanding Econometrics:** Econometrics combines economic theory, statistical analysis, and mathematical modeling to study economic phenomena empirically. It involves collecting, analyzing, and interpreting data to test hypotheses and make predictions about economic relationships.
2. **Applications in Education:** Econometrics is widely used in education research to study the impact of educational interventions, policies, and programs on individual and societal outcomes. Researchers use econometric techniques to analyze data on educational attainment, test scores, school quality, and other relevant variables.
3. **Identifying Causal Effects:** One of the primary goals of econometrics in education is to identify causal relationships between educational inputs (such as school resources, teacher quality, and class size) and educational outcomes (such as student achievement, graduation rates, and earnings).
4. **Measuring Returns to Education:** Econometrics is used to estimate the returns to education, which quantify the economic benefits of acquiring additional schooling or training. Researchers use various econometric techniques, such as wage regression models and instrumental variable approaches, to estimate the impact of education on individuals' earnings and labor market outcomes.
5. **Policy Evaluation:** Econometrics plays a crucial role in evaluating education policies and reforms aimed at improving educational outcomes and reducing disparities. Researchers use econometric methods to assess the effectiveness of interventions such as school vouchers, class-size reductions, and teacher training programs.
6. **Challenges and Limitations:** Econometrics faces various challenges and limitations in education research, including data limitations, measurement error, endogeneity, and selection bias. Researchers must carefully address these issues to ensure the validity and reliability of their findings.
7. **Future Directions:** As data availability and computational power continue to expand, econometrics in education research is evolving rapidly. Researchers are increasingly using advanced econometric techniques, such as machine learning and causal inference methods, to address complex research questions and inform evidence-based education policy decisions.

Grammar:

linkers: despite /although/ because /however /so/ but

- But and However can contrast ideas, but they are used differently.

a) But: This is a conjunction that links two parts of a sentence together. It goes before the clause that has the contrast.

e.g. I did well at the interview but I didn’t get the job

b) However: is an adverb. It comes after the part of the sentence that is being contrasted.

e.g. I did well at the interview, However; I didn’t get the job.

- Despite / in spite of: These are prepositions and are followed by nouns. They can’t be followed directly by a verb. If a verb is used it must be changed to the noun form (gerund).

e.g. Despite doing well at the interview I didn’t get the job.

In spite of doing well at the interview I didn’t get the job.

- Although / Even though: These conjunctions are used at the beginning of a clause. They introduce a contrast between two ideas, sentences or clauses.

e.g. Even though I did well at the interview, I didn’t get the job.

I didn’t get the job, Although I did well at the interview.

- Because/as/ since/because of/ owing to: used to express the reason or cause of something.

e.g. Because of his lack of training he had difficulties finding a job

- So/to/ in order to/therefore/ as a result/consequently: used to express the consequences of something.

e.g. We had a meeting today in order to discuss next year’s programme.

Activity:

Complete the following sentences with: despite /although/ because /however /so/ but

1) Sales of our range of fruit juices improved beceause we made the packaging more attractive.

2) Profits continued to rise despite a slight increase in production costs.

3) We plan to centralise distribution so costs are likely to decrease.

4) We launched our advertising campaign three months ago, however; sales have not recovered yet.

5) Profits went up although sales did not seem to improve.

6) I was really angry but I tried not to show it.