

Instructions - Mechanism B

This is an experiment in the economics of decision making. The instructions are simple, and if you follow them carefully and make good decisions, you might earn a considerable amount of money. In this experiment, we simulate a procedure to allocate students to schools. The procedure, payment rules, and student allocation method are described below. Do not communicate with each other during the experiment. If you have questions at any point during the experiment, raise your hand and the experimenter will help you.

Procedure

- There are 36 participants in this experiment. You are participant #1.
- In this simulation, 36 school slots are available across seven schools. These schools differ in size, geographic location, specialty, and quality of instruction in each specialty. Each school slot is allocated to one participant. There are three slots each at schools A and B, and six slots each at schools C, D, E, F and G.
- **Your payoff** amount depends on the school slot you hold at the end of the experiment. Payoff amounts are outlined in the following table. These amounts reflect the desirability of the school in terms of location, specialty and quality of instruction.

Slot received at School:	A	B	C	D	E	F	G
Payoff to Participant #1 (in dollars)	13	16	9	2	5	11	7

The table is explained as follows:

- You will be paid \$13 if you hold a slot at school A at the end of the experiment.
- You will be paid \$16 if you hold a slot at school B at the end of the experiment.
- You will be paid \$9 if you hold a slot at school C at the end of the experiment.
- You will be paid \$2 if you hold a slot at school D at the end of the experiment.
- You will be paid \$5 if you hold a slot at school E at the end of the experiment.
- You will be paid \$11 if you hold a slot at school F at the end of the experiment.
- You will be paid \$7 if you hold a slot at school G at the end of the experiment.

***NOTE* different participants might have different payoff tables.** That is, payoff by school might be different for different participants.

- During the experiment, each participant first completes the Decision Sheet by indicating school preferences. Note that you need to rank all seven schools in order to indicate your preferences.
- After all participants have completed their Decision Sheets, the experimenter collects the Sheets and starts the allocation process.
- Once the allocations are determined, the experimenter informs each participants of his/her allocation slot and respective payoff.

Allocation Method

- In this experiment, participants are defined as belonging to the following school districts.
 - Participants #1 - #3 live within the school district of school A,
 - Participants #4 - #6 live within the school district of school B,
 - Participants #7 - #12 live within the school district of school C,
 - Participants #13 - #18 live within the school district of school D,
 - Participants #19 - #24 live within the school district of school E,
 - Participants #25 - #30 live within the school district of school F,
 - Participants #31 - #36 live within the school district of school G.
- In addition, for each school, a separate **priority order** of the students is determined as follows:
 - **Highest Priority Level:** Participants who rank the school as their first choice AND who also live within the school district.
 - **2nd Priority Level:** Participants who rank the school as their first choice BUT who do not live within the school district.
 - **3rd Priority Level:** Participants who rank the school as their second choice AND who also live within the school district.
 - **4th Priority Level:** Participants who rank the school as their second choice BUT who do not live within the school district.
 - \vdots $\quad \quad \quad \vdots$
 - **13th Priority Level:** Participants who rank the school as their seventh choice AND who also live within the school district.
 - **Lowest Priority Level:** Participants who rank the school as their seventh choice BUT who do not live within the school district.
- The ties between participants at the same priority level are broken using a fair lottery. This means each participant has an equal chance of being the first in the line, the second in the line, \dots , as well as the last in the line. To determine this fair lottery, a participant will be asked to draw 36 ping pong balls from an urn, one at a time. Each ball has a number on it, corresponding to a participant ID number. The sequence of the draw determines the order in the lottery.
- Therefore, to determine the priority order of a student for a school:
 - The first consideration is how highly the participant ranks the school in his/her Decision Sheet,
 - The second consideration is whether the participant lives within the school district or not, and
 - The last consideration is the order in the fair lottery.

- Once the priorities are determined, slots are allocated in seven rounds.

- Round 1. a. An application to the first ranked school in the Decision Sheet is sent for each participant.
- b. Each school accepts the students with higher priority order until all slots are filled. These students and their assignments are removed from the system. The remaining applications for each respective school are rejected.
- Round 2. a. The rejected applications are sent to his/her second ranked school in the Decision Sheet.
- b. If a school still has available slots remaining from Round 1, then it accepts the students with higher priority order until all slots are filled. The remaining applications are rejected.
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- Round 6. a. The application of each participant who is rejected by his/her top five choices is sent to his/her sixth choice.
- b. If a school still has slots available, then it accepts the students with higher priority order until all slots are filled. The remaining applications are rejected.
- Round 7. Each remaining participant is assigned a slot at his/her last choice.

An Example:

We will go through a simple example to illustrate how the allocation method works.

Students and Schools: In this example, there are six students, 1-6, and four schools, Clair, Erie, Huron and Ontario.

Student ID Number: 1, 2, 3, 4, 5, 6 Schools: Clair, Erie, Huron, Ontario

Slots and Residents: There are two slots each at Clair and Erie, and one slot each at Huron and Ontario. Residents of districts are indicated in the table below.

School	Slot 1	Slot 2	District Residents
Clair	<input type="checkbox"/>	<input type="checkbox"/>	1 2
Erie	<input type="checkbox"/>	<input type="checkbox"/>	3 4
Huron	<input type="checkbox"/>		5
Ontario	<input type="checkbox"/>		6

Lottery: The lottery produces the following order.

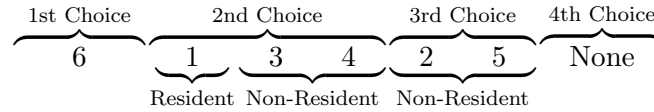
1 - 2 - 3 - 4 - 5 - 6

Submitted School Rankings: The students submit the following school rankings:

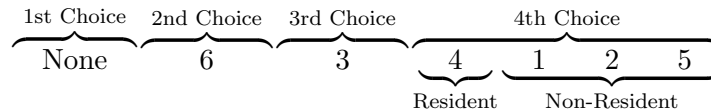
	1st Choice	2nd Choice	3rd Choice	Last Choice
Student 1	Huron	Clair	Ontario	Erie
Student 2	Huron	Ontario	Clair	Erie
Student 3	Ontario	Clair	Erie	Huron
Student 4	Huron	Clair	Ontario	Erie
Student 5	Ontario	Huron	Clair	Erie
Student 6	Clair	Erie	Ontario	Huron

Priority: School priorities depend on: (1) how highly the student ranks the school, (2) whether the school is a district school, and (3) the lottery order.

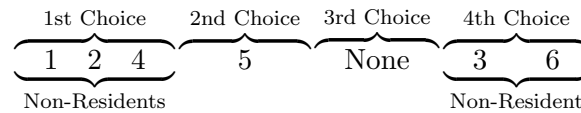
Clair : Student 6 ranks Clair first. Students 1, 3 and 4 rank Clair second; among them, student 1 lives within the Clair school district. Students 2 and 5 rank Clair third. Using the lottery order to break ties, the priority order for Clair is 6-1-3-4-2-5.



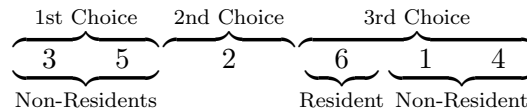
Erie : Student 6 ranks Erie second. Student 3 ranks Erie third. Students 1, 2, 4 and 5 rank Erie fourth; among them student 4 lives within the Erie school district. Using the lottery order to break ties, the priority for Erie is 6-3-4-1-2-5.



Huron : Students 1, 2 and 4 rank Huron first. Student 5 ranks Huron second. Students 3 and 6 rank Huron fourth. Using the lottery order to break ties, the priority for Huron is 1-2-4-5-3-6.



Ontario : Students 3 and 5 rank Ontario first. Student 2 ranks Ontario second. Students 1, 4 and 6 rank Ontario third; among them student 6 lives within the Ontario school district. Using the lottery order to break ties, the priority for Ontario is 3-5-2-6-1-4.



Allocation: This allocation method consists of the following rounds.

Round 1 : Each student applies to his/her **first choice**: Students 1, 2 and 4 apply to Huron, students 3 and 5 apply to Ontario and student 6 applies to Clair.

- School Clair accepts Student 6.
- School Huron accepts Student 1 and rejects Students 2,4.
- School Ontario accepts Student 3 and rejects Student 5.

Applicants	School	Accept	Reject	Slot 1	Slot 2
6	Clair	6	→	6	□
	Erie	→	→	□	□
1, 2, 4	Huron	1	2, 4	1	—
3, 5	Ontario	3	5	3	—

Accepted students are removed from the subsequent process.

Round 2 : Each student who is rejected in Round 1 then applies to his/her **second choice**: Student 2 applies to Ontario, student 4 applies to Clair, and student 5 applies to Huron.

- No slot is left at Ontario, so it rejects student 2.
- Clair accepts student 4 for its last slot.
- No slot is left at Huron, so it rejects student 5.

Applicants	School	Accept	Reject	Slot 1	Slot 2
4	→ Clair	→ 4	→	<input type="checkbox"/> 6	<input type="checkbox"/> 4
	→ Erie	→	→	<input type="checkbox"/>	<input type="checkbox"/>
5	→ Huron	→	5	<input type="checkbox"/> 1	—
2	→ Ontario	→	2	<input type="checkbox"/> 3	—

Round 3 : Each student who is rejected in Rounds 1-2 applies to his/her **third choice**: Students 2 and 5 apply to Clair.

- No slot is left at Clair, so it rejects students 2 and 5.

Applicants	School	Accept	Reject	Slot 1	Slot 2
2, 5	→ Clair	→	2, 5	<input type="checkbox"/> 6	<input type="checkbox"/> 4
	→ Erie	→	→	<input type="checkbox"/>	<input type="checkbox"/>
	→ Huron	→	→	<input type="checkbox"/> 1	—
	→ Ontario	→	→	<input type="checkbox"/> 3	—

Round 4 : Each remaining student is assigned a slot at his/her **last choice**: Students 2 and 5 receive a slot at Erie.

Applicants	School	Accept	Reject	Slot 1	Slot 2
	→ Clair	→	→	<input type="checkbox"/> 6	<input type="checkbox"/> 4
2, 5	→ Erie	→ 2, 5	→	<input type="checkbox"/> 2	<input type="checkbox"/> 5
	→ Huron	→	→	<input type="checkbox"/> 1	—
	→ Ontario	→	→	<input type="checkbox"/> 3	—

Based on this method, the final allocations are:

Student	1	2	3	4	5	6
School	Huron	Erie	Ontario	Clair	Erie	Clair

You will have 15 minutes to go over the instructions at your own pace, and make your decisions. Feel free to earn as much cash as you can. Are there any questions?

Decision Sheet - Mechanism B

- Recall: You are participant #1 and you live within the school district of School A.
- Recall: **Your payoff** amount depends on the school slot you hold at the end of the experiment. Payoff amounts are outlined in the following table.

School:	A	B	C	D	E	F	G
Payoff in dollars	13	16	9	2	5	11	7

You will be paid \$13 if you hold a slot of School A at the end of the experiment.
You will be paid \$16 if you hold a slot of School B at the end of the experiment.
You will be paid \$9 if you hold a slot of School C at the end of the experiment.
You will be paid \$2 if you hold a slot of School D at the end of the experiment.
You will be paid \$5 if you hold a slot of School E at the end of the experiment.
You will be paid \$11 if you hold a slot of School F at the end of the experiment.
You will be paid \$7 if you hold a slot of School G at the end of the experiment.

Please write down your ranking of the schools (A through G) from your first choice to your last choice. Please rank ALL seven schools.

1st choice	2nd choice	3rd choice	4th choice	5th choice	6th choice	last choice

Your I.D : Your Name (print): _____

This is the end of the experiment for you. Please remain seated until the experimenter collects your Decision Sheet.

After the experimenter collects all Decision Sheets, a participant will be asked to draw ping pong balls from an urn to generate a fair lottery. The lottery, as well as all participants' rankings will be entered into a computer after the experiment. The experimenter will inform each participants of his/her allocation slot and respective payoff once it is computed.