

Here is the results of the 2022 Critical Thinking (CT) test. This was conducted using the “Critical Thinking Test” originally developed by our College to measure the diploma policy of “Advanced thinking” of the School of Liberal Arts.

2022 年度のクリティカル・シンキング (CT) テスト結果について報告します。これは、国際教養学部のディプロマ・ポリシー「高度な思考力」を測定するために、本学が独自に開発した「クリティカル・シンキング・テスト」を活用して実施したものです。

**【Method】** CT test was conducted at Senior Thesis-1 (classes of C Yamamoto and B. Rodda) for third-year students (students enrolled in 2020) on December 9th, 2022. The number of examinees was 76. Question sheets (23 questions. See example below) prepared in English were distributed and collected after the exam. Students chose the correct answer from four options and answered it in Google Forms.

3 年生 (2020 年入学生) を対象に、2022 年 12 月 9 日 (金) の Senior Thesis-1 (C. ヤマモト、B. ロダ先生担当) の時間に CT テストを実施した。受験者数は 76 名だった。英語で作成した問題用紙 (23 問、文末の例題を参照) を配布し、学生は 4 つの選択肢から正解を選び、Google Forms で解答した。問題用紙は試験終了後、回収した。

**【Analysis】**

- 1) In 2022, 23 questions were used by excluding 3 questions with a low correct answer rate from the 26 questions up to last year. Figure 1 shows the Score distribution. Like last year, there is a polarization, but the trend is weakening. 2022 年度の出題数は、昨年度までの問題数 26 から正答率の低い 3 問を除外して、23 問とした。図 1 に成績分布を示す。昨年度のように二極化が見られるが、その傾向は弱まっている。

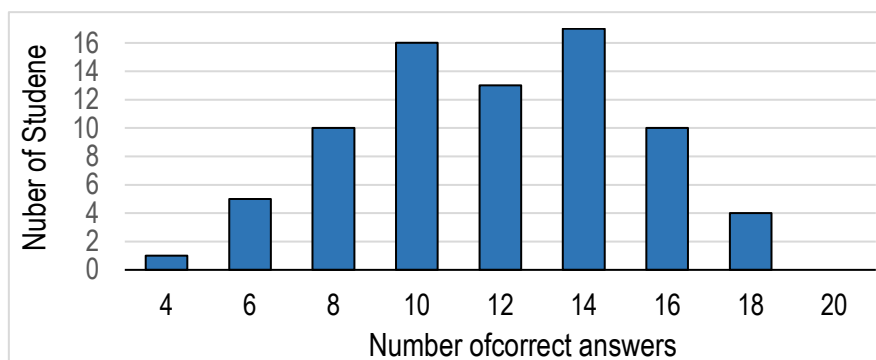


Figure 1. Score distribution of CT Test 2022.

- 2) Average percentage of correct answers is 49.1% (number of correct answers was 11.3 among 23 questions), which is shown in Table 1 together with past results. There was no significant changes compared to previous years.

正答率の平均値は 49.1% (23 問中平均 11.3 問正答) であり、表 1 に過去の結果とともに示す。例年の成績と比べて大きな変化がなかった。

Table 1. Average percentage of correct answers for each year (%)

Year	2016	2017	2018	2019	2020	2021	2022
Correct answer %	55.0%	47.7%	50.4%	50.4%	46.3%	46.9%	<b>49.1%</b>

- 1) Table 2 shows the number of students who answered each question correctly and the relationship between each question and CT elements. The percentage of correct answers was high in ④ Categorical Thinking and low in ② Evaluating reliability of information (Table 3). This trend has not changed significantly from last year.

表 2 に、各問に正答した学生数および各問題と CT 要素との関係を示す。正答数は、「④分類的思考法」で高く、「②情報の信頼性の評価」で低くなった (表 3)。この傾向は、昨年度と大きな変化はない。

Table 2. No. of Correct Answer

Questions	CT element	No. of correct students
12 Tom&Ken	⑥	63
13 Mushroom	③	53
15 Symotims	④	52
3 New heaven	①	51
18 Order	①	51
1 Eggplant	④	49
11 Tom&Ken	⑤	48
8 Hockey	⑦	47
2 Fossil fuel	⑤	44
7 Noedwell	⑤	38
21 Kangaroo	⑥	36
14 Mushroom	③	33
9 Europa	②	32
17 Order	⑦	31
16 Symotims	④	31
20 Kangaroo	②	30
5 Sick school	③	29
6 Accident	②	29
4 Influenza	②	27
10 Baseball	⑦	26
23 Kangaroo	⑥	26
22 Kangaroo	⑤	20
19 Order	①	16
Total		863

Table 3. Correct answer rate for each CT element

CT Element	Correct No. <sup>a)</sup>	Correct answer % <sup>b)</sup>
④ Categorical Thinking 分類的思考法	132 (3)	<b>58% (55%)</b>
⑥ Application & evaluation 適用と評価	125 (3)	55% (46%)
① Identifying related information 関連情報の見極め	118 (3)	52% (58%)
③ Method & strategy 手法と攻略法	115 (3)	50% (43%)
⑤ Perspectival thinking 見通しを持った思考法	150 (4)	49% (50%)
⑦ Deduction 推論	104 (3)	46% (35%)
② Evaluating reliability of information 情報の信頼性の評価	118 (4)	39% (45%)

a) Values in parentheses are number of questions in each CT element. b) Percentages in parentheses are for 2021.

- 2) In the previous CT test for first-year students, the correct answer rate was about 38%, so it is judged that the critical thinking ability has been acquired in three years of study.

以前に実施した1年生対象のCTテストでは、正答率は38%程度だったことから、3年間の学修でクリティカル・シンキング能力は身に付いていると判断される。

問題例 Example of Question

1. According to scientists, a fruit has seeds. A fruit develops from part of a plant's flower called an ovary. By comparison, a vegetable does not develop from a flower. A vegetable is a plant's root, stem, or leaf. According to scientists, is an eggplant a fruit or vegetable?

- a) An eggplant is a vegetable because you must cook it before you eat it.
- b) An eggplant is a fruit because it develops from a flower's ovary.
- c) An eggplant is a vegetable because its seeds are small enough to eat.
- d) An eggplant is a fruit because it grows above the ground.

