· For citation:

Reinelt, Rudolf (2011) Simulating the future of 2FLs. In: Reinelt, R. (ed.) (2011) The OLE at JALT 2011 Compendium compiled for OLE by Rudolf Reinelt Research Laboratory, Ehime University, Matsuyama, Japan, p. 68 – 73.

2011 11 20 JALT2011 Multilingualism Forum Simulating the 2FL future Rudolf Reinelt, Ehime University

Contact: Ehime University Institute for Education and Student Support, Center for General Education 790-8577 Matsuyama

reinelt.rudolf.my@ehime-u.ac.jp 愛媛大学 教育・学生支援機構 共通教育センター 790-8577 松山市文京町3 T/F 0081-89-927-9359

JALT2011 11 20 MultilFor Reinelt Simulating 2FL Future

	2005前期	2005後期	2006前期	2006後期	2007前期	2007後期	2008前期	2008後期
2FL1	668	188	562	355	257	121	205	122
2FL2	149	83	163	114	88	57	109	69
2FL3	749	259	592	457	307	127	192	109
2FL4	347	175	273	189	175	108	134	89
2FL5	6	5	9	8	10	9	7	
合計	1919	710	1599	1123	837	422	647	396
予測Totall	こ各言語の	割合を反映	したデータ					
2011後期	2012前期	2012後期	2013前期	2013後期	2014前期	2014後期	2015前期	2015後期
133.17	217.20	134.28	215.90	135.20	214.77	135.97	213.78	136.64
66.59	108.60	67.14	107.95	67.60	107.39	67.99	106.89	68.32
171.22	279.25	172.65	277.58	173.82	276.13	174.82	274.86	175.68
99.88	162.90	100.71	161.92	101.40	161.08	101.98	160.33	102.48
4.76	7.76	4.80	7.71	4.83	7.67	4.86	7.63	4.88
475.62	775.70	479.58	771.06	482.84	767.04	485.61	763.49	488.00
2018前期	2018後期	2019前期	2019後期	2020前期	2020後期	2021前期	2021後期	
211.35	138.23	210.67	138.66	210.05	139.05	209.47	139.41	
105.67	69.11	105.34	69.33	105.02	69.52	104.73	69.71	
271.74	177.72	270.87	178.27	270.06	178.78	269.31	179.24	
158.51	103.67	158.01	103.99	157.54	104.29	157.10	104.56	
7.55	4.94	7.52	4.95	7.50	4.97	7.48	4.98	
754.82	493.67	752.41	495.21	750.18	496.61	748.10	497.89	

JALT2011 11 20 MultilFor Reinelt Simulating 2FL Future

- Wake-up!
- Preface
- · Research conditions
- · Excluding conditions
- Brief look back
- · The present situation
- Before the research begins
- · Pedagocical Scheduling
- Preparatory considerations I
- Preparatory considerations II
 Data and their treatment
- Final considerations
- References

JALT2011 11 20 MultilFor Reinelt Simulating 2FL Future

Wake-up!

Japan as heaven of foreign language learning Just consider:

- FL learning is not compulsory in England beyond the age of 14 (recent changes!) (Hefce 2011)(internet)
- How many English native speakers in JALT speak another FL fluently?

However....

JALT2011 11 20 MultilFor Reinelt Simulating 2FL Future

With Japan's tendency to reduce its foreign language learning, especially on the university level, to English, a language all students already have been learning for six years, the situation of other languages becomes increasingly difficult, or so it seems.

6

Preface

- The author was asked to find out the state of 2FL at his university and make a simulation for the next 10 years.
- Accordingly, this presentation demonstrates how to prepare a simulation of future 2FL developments at a regional university.

JALT2011 11 20 MultilFor Reinelt Simulating 2FL Future

Research conditions

- For a full-fledged 2FL development prediction, usable for, or used by, a needs analysis, major research is necessary, which the university will not pay.
- Furthermore, with the most recent changes for example at the presenter's university, only going back a few years, and the data arriving in various shapes, statistical procedures appear impossible and nearly meaningless.

JALT2011 11 20 MultilFor Reinelt Simulating 2FL Future

- In the case presented here, un-cleaned but complete data are taken as basis for trends. for example for the fewer number of students in the winter term, while cleaned-up data are used as basis for predictions for the coming years.
- The presentation demonstrates the feasible statistics, and outcomes and their testing. This study will be relevant for teachers as well as administration and other important players involved in 2FL course decision making.

JALT2011 11 20 MultilFor Reinelt Simulating 2FL Future

Excluding conditions

- nation-wide developments cannot be taken into account,
- no new positions will be available for 2FLs,
- and syllabuses are to remain unchanged,

log-In curves give a common-sense indication of

JALT2011 11 20 MultilFor Reinelt Simulating 2FL Future

- the development of all 2FL students numbers as well
- as an idea of the future of individual FL course frequencies.

This simulation is however weak in cases of sudden changes and does not give individual teachers' class rates.

JALT2011 11 20 MultilFor Reinelt Simulating 2FL Future

Brief look back

2FL at the end of the eighties:

2FL with special status and compulsive

German still most taught 2FL

Large classes, some pressure

Suicide paper by Mishima, Kutsuwada, Ueda:

Natural reduction of students

-early nineties: no FL (not even English) required for university graduation

But departments can decide themselves whether they require their students to take a FL

Mostly only E

Privatization, rather: conditional dismission from the state's

Need for accountability

Necessity of future planning

Michael Long: Needs Analysis for FL teaching

Grupen (Hamburg)

For Japan??

Preference for science majors

JALT2011 11 20 MultilFor Reinelt Simulating 2FL Future

The present situation

Expectation: Reduction of 2FL

Early 2000s (Reinelt 2006): Still many 2FL taught

in the Chugoku-Shikoku area

14

JALT2011 11 20 MultilFor Reinelt Simulating 2FL Future

Ehime University as example

- 4 FL teachers tenured in 2002
- late in reducing 2FL
- since 2005 2FL not compulsive anymore 2FL on equal level with other non-required courses

JALT2011 11 20 MultilFor Reinelt Simulating 2FL Future

Before the research begins

Factors, variables
Omissable factors

Pedagocical scheduling

Term system: 15 weeks of 90 minutes classes : Start in April: Summer semester/term (->

August)

Second term starts in October: Winter

semester/term (-> February)

JALT2011 11 20 MultilFor Reinelt Simulating 2FL Future

Particularities of data gathering:

- Ask administration
- Data obtained
- a) general data for 2005-2010:

Usable as image data

b) - detailed data for ST 2007,2008,2009,2010 Usable as hard data JALT2011 11 20 MultilFor Reinelt Simulating 2FL Future

Preparatory considerations I

Winter semester/ winter term

- -has no new students
- can be configured as a % reduction of the SS student number
- find out trend of this reduction
 (for all languages, for individual languages)

Preparatory considerations II

"Hajimete no gaikokugo" (My new FL)
Usually taken in the first year at university

- > need to exclude second year and higher students

number not very high, negligible?, tendency??

JALT2011 11 20 MultilFor Reinelt Simulating 2FL Future

Data and their treatment

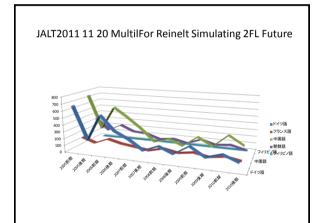
The refrom at Ehime university took place in 2004 and became effectual in Aporil 2005:

Relevance for this research:

Data only for a very short time

Change in 2005, first two years 2005 and 2006 residuals of the aftermath

Clean, usable data only from 2007 onwards



JALT2011 11 20 MultilFor Reinelt Simulating 2FL Future

- Settling in 2007 with the summer-winterrhythm
- · first data set
- (including 2-y, without evening students etc.)

22

JALT2011 11 20 MultilFor Reinelt Simulating 2FL Future
--

	2005前 期	2005後 期	2006前 期	2006後 期	2007前 期	2007後 期	2008前 期	2008後 期	2009前 期	2009後 期	2010前 期	2010後 期
German	668	188	562	355	257	7 121	205	122	2 251	1 124	1 189	106
French	149	83	3 163	3 114	88	57	109	69	101	1 61	93	3 54
Chinese	749	259	592	2 457	7 307	7 127	7 192	109	259	146	325	5 198
Korean	347	175	273	189	175	108	134	89	164	106	127	7 73
Filipino	6	5	5 9	8	10	9	7	7	7 6	4	3	1
Total	1919	710	1599	1123	837	7 422	647	396	781	1 441	737	7 432

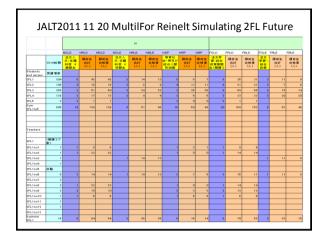
JALT2011 11 20 MultilFor Reinelt Simulating 2FL Future

Detailed data set:

- affords human resources
- -settle on three to four terms/years

winter term follows from summer, so summer term should be sufficient

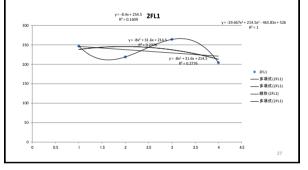
- . Data for each 2FL, teacher, each faculty/course
- 2FL obligatory for humanities and international course of paedagogics
- others elective!



- preparing trend and trendlines
- line (statistically safe and simple, especially important when there are few data)
- exponential: true (going through all points) at present, but escalating soon afterwards
- - log logarithm n: slightly bending curve, come closest to human developments except in case of surprises
- Monte Carlo: probably best in cases of wide uncontrollable variation, requires and produces large huge sets
- moving average: uses averge and adjusts next value to this, works with small numbers? Not yet tried

JALT2011 11 20 MultilFor Reinelt Simulating 2FL Future

• example F1 German



JALT2011 11 20 MultilFor Reinelt Simulating 2FL Future

Decrease rate

oukei	减少予測	辞める率			残る率		
		log	ехр	lin	log	ехр	lin
1	2007	49.5818399			50.41816		
2	2008	38.7944359			61.205564		
3	2009	43.5339309			56.466069		
4	2010	41.3839891			58.616011		
5	2011	39.1170815	38.71883	38.36	60.883401	62.02082	61.6
6	2012	38.17593762	37.08921	36.3746	61.8246	64.365	63.625
7	2013	37.38021181	35.52817	34.3892	62.620372	66.7978	65.610
8	2014	36.69092276	34.03284	32.4038	63.309701	69.32254	67.596
9	2015	36.08292673	32.60045	30.4184	63.917732	71.94271	69.581
10	2016	35.53905575	31.22834	28.433	64.461635	74.66191	71.56
- 11	2017	35.0470646	29.91398	26.4476	64.953655	77.48389	73.552
12	2018	34.59791187	28.65494	24.4622	65.402834	80.41254	75.537
13	2019	34.18473142	27.4489	22.4768	65.816038	83.45187	77.523
14	2020	33.80218606	26.29361	20.4914	66.198606	86.60609	79.508
15	2021	33.44604486	25.18695	18.506	66.554768	89.87952	81.49

JALT2011 11 20 MultilFor Reinelt Simulating 2FL Future

Second year students						
2007	1					
2008	7					
2009	22					
2010	23					
2011						

 While 215 in 2007 can be a residual of the reform, the recent increase could be disturbing

JALT2011 11 20 MultilFor Reinelt Simulating 2FL Future

- Insertion of the decrease %s and omitting second year students we get the long version
- 2005-2010:
- SS: detailed data as obtained
- WS as obtained
- from SS2010 on: SS as in the logIn, WS as the decution in the first data set.
- •
- : See separate sheet up until 2021

30

Final considerations

This data has to be updated continually.

This will also justify more statistical efforts.

Then the simulation comes closer to reality, however changes can not be accommodated.

This year already problematic: Down to 700s

Next problem already at the door:

Role of major's main classes in the students' schedules

JALT2011 11 20 MultilFor Reinelt Simulating 2FL Future

· Postscript: Unfairness towards 2FL

22

JALT2011 11 20 MultilFor Reinelt Simulating 2FL Future

References

- a) to the Japanese case: None: This is the first such attempt
- b) needs analysis: <u>Second Language Needs Analysis</u>
 (<u>Cambridge App...</u> (Paperback) <u>Michael H. Long</u>, Cambridge
 UP 2005/7
- c) Statistics available in excel (trendlines) and RKWard (free) psycholgy package
- d) Rudolf Reinelt (2006) OLE after the university reform in Japan. JALT 2006 Proceedings), P. 1119-1131.