コンピュータ&エデュケーションVol.8

C O N T E N T S

OINTERVIEW

コンピュータ, インターネットとどうつきあうか 『季刊・本とコンピュータ』編集長 津野 海太郎氏に聞く

インタビュアー 赤間 道夫(編集長 愛媛大学)

● 特 集 「電子図書の未来」

電子書籍は紙の本を越えるか	元・電子書籍コンソーシアム 鈴木 雄介	13
インターネットと研究	金沢大学 田中 一郎	18
電子テキストのあやうさ	岩手大学 境野 直樹	23
古本屋デジタル大作戦	文生書院 小沼 良成	28
京都大学電子図書館の現在	前・京都大学附属図書館長 菊池 光造	33
インターネット利用における著作権の問題	・コンピュータソフトウェア著作権協会 中川 ‡	尊子 38

●報告

CIEC小中高部会 第3回研究会報告 京都工芸繊維大学 山田 祐仁 40~多地点テレビ会議システムを利用して~

●コンピュータと教育・研究(活用事例)

SMILを用いた自習用教材の試作 東和大学メディアセンター 野口 亜希子・ 中田 由紀・井上 崇・若菜 啓孝

C言語の歩き方-Windows環境における系統的なC言語 専修学校京都コンピュータ学院 江見 圭司 51 教育-

●ソフトウェアレビュー

日本語環境における他言語入出力ツールとしての GlobalOffice 全国大学生活協同組合連合会 石野 雅之 57

●論文

An Analisis of Computer Literacy And its
Affects on Achievement Levelsパイサック=ジェイ・松本 敏治・杉岡 一郎 62教師のための認知科学 ~新教科「情報」と
「総合的な学習」を支えるもの~安城学園高等学校 神谷 良夫 68小・中学校のコンピュータ・ネットワーク構築 カスアー ウェース となっています。

富沢町立富河中学校 望月 武彦 74

<u>における課題と小規模LANモデル</u>
<u>EFLのための英語読解CALL</u>
<u>英語語彙学習におけるマルチメディアの</u>
可能性

摂南大学 吉田 晴世・同志社女子大学 三根 浩80

同志社女子大学 三根 浩・摂南大学 吉田 晴世 86

CONTENTSに戻る

●本の紹介

書籍名 発行年度等

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CIECタイピング教育推進PJチーム編本体価格1,200円

情報リテラシー 信報教育研究会編 技報学出版 2000年3月 126頁

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認知的アプローチによる外国語教育 竹内 理編著 松柏社 本体価格2,400円

ー早稲田大学文学部の試みー 早稲田大学出版部 本体価格1,000円

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●CIECからのご案内

2000PCカンファレンスのお知らせ

CIEC会誌投稿規定・論文執筆要綱

CIEC入会申込書

CIEC入会申込書(英語版)

編集後記

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AN ANALYSIS OF COMPUTER LITERACY AND ITS AFFECTS ON ACHIEVEMENT LEVELS

Jay PYSOCK*, Toshiharu MATSUMOTO*, Ichiro SUGIOKA*

The aims of this paper are to analyze the effects of computer literacy on achievement levels in CAI, and to see how much a CAI lesson (with computer literate students) compares with a normal (no computer) live instructor controlled lesson. Two groups of university students were presented identical computer software based lessons (one group Computer Literate and the other group Non- Literate). A third group was given a live instructor controlled lesson with the identical study material as the Computer Groups. Results revealed that the Non-Literate Group scored considerably lower than the Literate Group. Between the Live Instructor's Group

and the Computer-Literate Group, results were found to be similar. Computer literacy is addressed in detail and some alternatives for achieving full computer literacy are recommended.

Keywords: Computer Literacy, Multimedia Education

CONTENTSに戻る

教師のための認知科学 ~新教科「情報」と「総合的な学習」 を支えるもの~

神谷 良夫

<概要>

高等学校において10年余り情報教育を行ってきた。ハードウエア・ソフトウエアが目まぐるしく技術 革新されていく中で学校という現場に本当に必要な情報教育は何かという疑問にぶつかった。その答えの 一つが認知科学にあるとに考えて、授業に認知科学を織り込もうとした。

本稿では2003年より始まる「情報」や「総合的な学習」を担当する教師のために見失われる可能性のある重要な視点について述べる。

キーワード:人間の情報処理、分かちもたれた賢さ、総合的な学習、学びあう学び、 愛知サマーセミナー

Cognitive Science for Teachers--Supporting the New Subjects "Information Technology" and "Multidisciplinary Learning"

Yoshio Kamiya

<Abstract>

I have been teaching Information (Computer) Technology for more than ten years at high-school. Through the rapid technological innovations of hardware and software during this time, I have come to ask myself what is most important for information education in school.

It is my belief that one possible answer is to blend some elements of Cognitive Science into the regular curriculum. This paper discusses some important but often overlooked viewpoints necessary for teachers who will be teaching "Information Technology" and "Multidisciplinary Learning" beginning in the year 2003.

Keywords: Human Information Processing, Distributed Intelligence, Multidisciplinary Learning, Cooperative Learning, Aichi Summer Seminar

CONTENTSに戻る

小・中学校のコンピュータ・ネットワーク構築における課題と 小規模LANモデル

望月 武彦

<概要>

最近、特に学校教育現場へのコンピュータ・ネットワーク(校内LAN)システムの導入が叫ばれている。1999年12月に公表された「教育の情報化プロジェクト」に関する報告 [1] によれば、今後数年の間にほとんどの学校に校内LANが整備される見通しとなる。このような状況の中、各学校は校内LANシステムを利用したインターネットや事務処理等を行うことになる。そこで本稿では、この急速な変化に対応するために、小・中学校、行政はどのような利用、運用をすべきなのか、またどのようなコンピュータ・ネットワークシステムを構築すれば良いのかを現職教師の視点から検証、考察した。

キーワード:校内LAN、コンピュータ・ネットワーク

Problems in Implementation of a Computer Network in Primary and Junior High Schools and Small LAN Models

Takehiko MOCHIZUKI

Abstract

Computer network (the school LAN) systems have recently been introduced to primary and junior high schools. According to the Information-oriented Education Project (December/1999), network systems will be prepared for all schools within a few years. To cope with the unsolved problems in new phase of the situation, small network systems are proposed, including Linux or Windows NT servers.

Key words: the school LAN, computer network, Linux

CONTENTSに戻る

EFLのための英語読解CALL

吉田 晴世 三根 浩

<概要>

PC(Personal Computer)は語学教育の重要な役割を担う技術基盤としてさまざまな形で活用されてきている。とくに英語を外国語として(EFL; English as a Foreign Language)学習する分野では「読み」「書き」「聞き」「話す」という4つのスキルを向上させる上でPCによるCALL(Computer Assisted Language Learning)は有力な教育手段である。本研究は、「読み」のスキルに関する教育方法として、まず、直読による速読CALLシステムによる指導法を紹介する。この速読訓練においては学習者の語彙力が重要な要素のひとつである。そこで、語根と接辞の結合原理を活用したCALLによる語彙学習システムを取り上げる。さらに、統合的な実用英語CALLについて、テキストベースで学習する場合とマルチメディアで学習する場合を比較することで、マルチメディアCALLの教育的な可能性について考察する。

Key words: CALL, EFL, 速読, 読解, 語構造

English Reading CALL for EFL learners

Haruyo YOSHIDA, Hiroshi MINE

<Summary> PCs (Personal Computers), utilized in the various ways, play an important role in language education. Especially, in the field of EFL (English as a Foreign Language), PCs are

powerful means for improving four skills; reading, writing, listening, and speaking. In this study of improving reading skills, we introduced a speed reading CALL (Computer Assisted Language Learning) system. This system was designed to improve learner's English reading comprehension without rearranging it into Japanese syntactical patterns. For the speed reading skill, the learner's vocabulary is one of an important factor in improving their reading ability. Thus, a new vocabulary learning device, using word unit analysis based on the combinations of prefixes, roots, and suffixes was discussed. Finally, concerning a practical English CALL system, we considered the possibility of educational multimedia by comparing the use of a text-based system with a multimedia system. Key words: CALL, EFL, Speed reading, Reading comprehension, Word unit analysis

CONTENTSに戻る

英語語彙学習におけるマルチメディアの可能性

三根 浩 吉田 晴世

<概要>

PC(Personal Computer)の普及と同時にマルチメディアは語学学習の重要な役割を担う技術としてさまざまな形で活用されてきている。とくに英語を外国語として学習する(EFL; English as a Foreign Language)分野においてマルチメディアは強力な教育手段である。本研究は、マルチメディアの語学教育に果たす役割を論じたあと、その具体的な活用法について提案する。マルチメディアの教育的効果を生かすために、語根と接辞の接合原理を活用した語彙学習CALL(Computer Assisted Language Learning)システムと句動詞による動詞のコア・イメージ学習CALLシステムを開発した。最後に、これらの教材を通してマルチメディアの教育的な可能性について考察する。

Key words: CALL, Multimedia, EFL, 語彙, 句動詞, コア・イメージ

The possibility of multimedia in English vocabulary learning

Hiroshi MINE, Haruyo YOSHIDA

<Summary> As PCs spread, multimedia is being utilized in various forms as a technique which plays an important role in language learning. In the field of EFL (English as a Foreign Language), multimedia may be an especially powerful educational tool. In this study, we discussed the educational role of multimedia for language learning. We developed two new vocabulary learning devices: the "Root" software using word unit analysis based on the combinations of prefixes, root, and suffixes; and a system using the core image of the verb and particle of phrasal verbs. We considered the potential of multimedia to be educational by these multimedia CALL systems. Key words: CALL, Multimedia, EFL, Vocabulary, Phrasal verb, Core image

CONTENTSに戻る

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Computer & Education Vol.8. 2000

C O N T E N T S

INTERVIEW

How to Deal With Computers and the Internet
Interview with Kaitarou Tuno

Special Reports The Future of Electronic Libraries Articles

Will Electronic Books Surpass Paper Books?	Yusuke Suzuki	13
Internet and Research Work	Ichiro Tanaka	18
Textual Variants and Electrical Texts: One word for Statistical Approach	Naoki Sakaino	23
A Digital Secondhand Bookseller	Yoshishige Onuma	28
Kyoto University Digital Library Now	Kozo Kikuti	33
The Issue of Copyrights on the Internet	Hiroko Nakagawa	38

Report

Report of the 3rd Meeting of Elementary, Junior Hlgh and High School Section Yujin Yamada 40

-The Practice of Video Conferencing from 4 Locations-

Computers and Education/Research

The Development of Teaching Materials for Akiko Noguchi, Yuki Nakata,
Self-Learning Using SMIL
- A Systematic Way of Learning C Language in

a Keiji Emi 51
Windows Environment-

●Software Review

GlobalOffice as a Tool for the Input and Output of a Foreign Language in a Japanese Environment Masayuki Ishino 57

Articles

An Analisis of Computer		0.0
Literacy And its Affects on	Jay Pysock, Toshiharu Matsumoto, Ichiro Sugioka	62
Achievement Levels		
Cognitive Science for TeachersSupporting the		
New Subjects	Yoshio Kamiya	68
"InformationTechnology" and	rearing a	00
"Multidisciplinary Learning"		
Problems in Implementation		
of a Computer Network in		
Primary and Junior High	Takehiko Mochizuki	74
Schools and Small LAN		
Models		
English Reading CALL for EFL learners	Haruyo Yoshida , Hiroshi Mine	80
The possibility of multimedia in English vocabulary learning	Hiroshi Mine Haruyo Yoshida	86
<u>CONTENTS</u>		
●Book Review		
●CIEC INFORMATION		
· 2000 PC Conference		
· Notice to Authors of Papers		
· Application Form		
· Editorial Notes		
□ Articles □		

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Returns to CONTENTS

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Returns to CONTENTS

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Returns to CONTENTS

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Returns to CONTENTS

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verbs. We considered the potential of multimedia to be educational by these
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Returns to	CONTE	NTS
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Returnsto List of Publication