A Review of Scott Rule's Ideas on Constructionism, Hypermedia Authoring, and Language Learning

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(Received June 10, 1997)

ABSTRACT

Partially based on a presentation made at the annual "CALL Basics and Beyond" conference held at Chubu University in Nagoya on May 31, 1997.

KEY WORDS

Constructionism; Traditional Approach; CALL (Computer Assisted Language Learning).

1.1 Introduction:

Of all of the presentations, given at this year's JALT CALL conference in Nagoya, Mr. Rule's was the most interesting, and directly applicable to our situation here at Takaoka National College. This paper will begin by describing constructionism, contrasting it with the traditional student-teacher paradigm commonly found in both Japan and the US. This will be followed by a description of Mr. Rule's experiments in using Hypercard and Hyperstudio as tools to help intermediate-level students express their ideas in ways that many of them found to be personally satisfying. The paper will conclude by suggesting ways that constructionist educational philosophy might be applied in the CALL classroom at Takaoka National College.

1.2 Constructionism and Language Learning

What is constructionism, and how is it different from more traditional approaches? Constructionism, as Rule explains it, encompasses the idea that students should be actively involved in the creation of knowledge instead of being passive recipients as in the traditional classroom—merely soaking up the knowledge that teachers fill their heads with during classroom lectures. The more traditional
educational paradigm encourages student passivity, although it does tend to make it more likely that students will be exposed to a larger body of knowledge. Unfortunately, too often in the traditional paradigm, students are not given any opportunity at all to explore and critically examine the information thrown at them by teachers; in this case, students have little chance to internalize the information, determining the relevance of classroom lectures to them. In a constructionist environment, students are encouraged to explore the personal relevance and meaning of information given to them by their teachers. This often occurs in pairs or small groups, while traditional teaching and learning involves predominantly one-way lectures where the teacher speaks and the students passively listen.

What points are the essential to the successful introduction of constructionist learning? First, the students should be asked to adopt this kind of learning approach only when they have achieved at least an intermediate level of competence in the subject matter being taught; education becomes mere play unless it is based upon knowledge that provides the students with the basic foundation necessary to create their own personally meaningful material. In fact, although outside the scope of his presentation, the misapplication of this learning/teaching style in the American public school system has been widely criticized; many feel that the misuse of constructionism—or the overemphasis on teaching "the creative process" without any knowledge foundation—is directly to blame for the decline in achievement test scores.

To apply constructionist strategies in the intermediate to advanced level ESL/EFL CALL classroom in the way that Mr. Rule suggests, detailed planning and very favorable student to teacher ratios are essential. First, the teacher would have to spend an enormous amount of classroom time teaching the students how to use the authoring software. Then, the students should be provided with some very general guidelines about the goals of the project and how students should proceed; for example, the teacher might tell the students that the objective is for the student to create an interactive Hypercard stack that contains material that the student has truly created by him or herself. The student is then given complete freedom to design and present the information in any way that he or she sees fit. Throughout this process, the teacher is constantly providing feedback, discouraging students from simply copying and pasting things from other sources.

Mr. Rule also talked about the major hindrances involved with teaching the students authoring skills, while still retaining some kind of focus on language learning. He points out that it took an entire academic year for his students to complete their projects, which seemed to encompass little more than one Hypercard or Hyperstudio stack. Getting the students to truly think constructively throughout the entire process seems to have been the major challenge, but he proudly showed the audience several examples of excellent student-produced stacks; these stacks included excellent sound, graphics, and well-thought-out interactive stories.
1.3 Conclusions

Despite the many positive aspects of Mr. Rule's application of the constructionist paradigm to the CALL classroom, the audience began to question whether it is worth the effort to require the students to use Hypercard for the purpose of creating their own projects. Many of the teachers in the audience were experienced with using Hypercard, and a few of them seemed to feel that creating web-based documents using a user-friendly HTML editor such as Claris HomePage might be a more efficient way of allowing students to be creative.

This writer tends to feel that the use of the menu driven HTML editor in Claris HomePage would be far superior to Hypercard for adaptation in a similar project with our students at Takaoka National College. I think that there are two main reasons for this. First, all of our first year students are taught how to use Claris Works during their first year of courses. Since Claris Works and Claris HomePage have very similar interfaces, it would be very easy for our students to learn how to use HomePage, with its self-explanatory menu-driven format; adopting Hypercard would require several times the initial effort just to teach students the basics, let alone the more complicated scripting functions that might be necessary to take full advantage of Hypercard's multimedia features. Second, the multimedia bells and whistles seem to be completely irrelevant to the instructional objectives of the project, which mainly focus upon getting the students to produce a unique and personally relevant interactive story.

The students web-based projects could be stored on one of the computers on the TNC LAN, where they would be available for perusal by other students and faculty. Students and the supervising faculty member could then make leave comments and suggestions for the author.

References
コンストラクションズム、ハイパーメディア・オーサリングと
語学学習に関するスコット・ルール氏の発想について

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(平成9年6月10日受理)

要 旨

名古屋市で開催された今年度のJALT CALL研究会における全ての発表のうち、ルール氏の発表が最も興味深いものであり、本学の現状に直接適用可能なものであった。本稿は、まず、コンストラクションズムについて説明し、日本及び米国で普通にみられる伝統的な教授者・学習者の指導パラダイムと比較・対照する。次いで、ハイパー・カードとハイパー・スタジオを学習ツールとして、中級レベルの学生に、その多くが自分の考えを個的な満足感を持って自己表現できるよう援助するルール氏の実験的指導例について述べる。最後に、コンストラクションズムの教育理念が本学のCALLクラスで適用される場合のあり方を提案する。

キーワード
コンストラクションズム、伝統的指導法、CALL（コンピュータ支援語学学習）