

Program Strategies

In this section we will outline a program for the Britannica's entry into the videodisc and electronic media market. The suggestions which cover a broad spectrum, have been formulated with an overall strategy. The strategy is based on the assumption that while the consumer/education market will not mature for several years, the existing market is big enough to support initial efforts, which in turn will have a significant effect on the development of the fully mature market. Further, the strategy is based on the understanding that for the foreseeable future, the Britannica's foundation will be printed materials. Any efforts in the electronic media field should as much as possible support the sale and distribution of the printed materials.

Briefly, the strategy consists of program developments in three areas, single topic programs, visual supplements to the existing Britannica, and the development of two different, fully electronic encyclopaedias. The first two, designed for the existing market, will lay the basis for the fully electronic encyclopaedia which will be many years in the making. The single-topic programs will:

- a) Put the Britannica decisively into the marketplace at a relatively low cost. This will prevent the Britannica from losing its position in the consumer/educational market as that market moves increasingly into electronic media. As the Britannica name comes to be associated with top quality electronic materials, people will begin to look to it as the leader in the field as

they currently do in print (and film, via EBEC). This may be quite significant as there will likely be at least one, possibly as many as

products billing themselves as electronic encyclopaedias, that will come to market before the Britannica. If the Britannica has established itself in the market, many people will "wait" for the Britannica, thus protecting its market share.

- b) Provide valuable experience in the development of electronic materials. It is unquestionably more prudent to learn all about what it means to produce electronic media on a series of relatively low cost programs than on a multi-million dollar electronic encyclopaedia.

- c) Support the current print materials in three ways. First, if marketed properly, these programs should provide considerable name recognition for the Britannica. For example, not only would there be significant media attention to a series of programs bearing the Britannica name, but, it would put the Britannica name quite prominently in places where it has never been before, in the video stores, etc. Second, the electronic materials could be tied directly to the print materials, referring the reader to the Encyclopaedia or another of the Britannica's books. Third, these materials could be offered as premiums to people who purchased the Encyclopaedia.

A note on multiple formats and delivery systems.

In many cases, if planned from the beginning it will be possible to produce more than one program from the same basic

material. For example, a program on the National Museum of Air and Space could be designed for an interactive videodisc, using the full range of capabilities that the system provides. But also, the footage could be used to produce a linear program that would be suitable for distribution on videotape, the RCA videodisc system, or on broadcast TV. Or similarly, a program on archaeology could be developed in the same way, with the possible added advantage of producing a complete telecourse on the subject, using additional footage that was shot when the original program was produced. Getting the maximum mileage out of the materials in this way will help recoup costs as early as possible. It will also provide a practical way to explore the differences between the various delivery systems that you will be designing programs for.

Projected costs for each of the programs will be mentioned along with the description. A more thorough discussion of costs can be found in the section on _____ along with a discussion of the potential market and distribution considerations. Similarly, the possibility of the Britannica entering into joint ventures for any of these programming efforts will be taken up in a separate section, #____.

ELECTRONIC VIDEO ENCYCLOPAEDIA

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As suggested in the introduction, the exponential increase in the quantity of information and the increasing complexity of the body of knowledge call for more powerful intellectual tools. We don't think it would be an exaggeration to say that an encyclopaedia that took full advantage of the range of new technologies might be the most valuable development. In the following section we will discuss the creation of two different encyclopaedias, one for children, on the order of Compton's, and the other, a wholly electronic edition of the Encyclopaedia Britannica. These projects are futuristic only in the sense that it would be at least five to ten years in the future before either could be ready in a completed form. We have taken care to formulate our conception of such products in accordance with the technology that is available today or that will certainly be available by the time the encyclopaedias are ready. Guiding our thinking has been the view that the use of new technologies will be valuable in so far as they enable us to present material in new ways that give the user considerably more power over the domain of knowledge. Certainly, there will be many attempts to use these new technologies to repackage current materials or to take current materials and add icing to the cake. Both the Academic American Encyclopaedia and the World Book seem to be on this track. The approach for the Britannica should be to make the most powerful educational tool that is currently possible.

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Only this goal will produce a product that will match the requirements of the time.

Following the analogy made in the introduction of an encyclopaedia as a window into the domain of knowledge, we think this has different implications for materials prepared for children and adults. For children, the process of learning how to learn and learning how to think far outweighs the importance of mastering any particular discipline. For adults, hopefully, the reverse is true and the encyclopaedias made for children and adults should reflect this fundamental difference.

THE COMPTON VIDEODISC ENCYCLOPAEDIA

As envisioned, the Compton Videodisc Encyclopaedia would consist of 20-30 videodisc "volumes." The key features of this encyclopaedia are as follows:

Topical Organization

Organized topically, each volume or group of volumes would cover a particular branch of knowledge. Within each branch, the material would be presented alphabetically. For example, the disc on animal biology will cover aardvarks, frogs, and squirrels in alphabetical order. The usual objection to a topical organization is that it is too hard to find your way through the material. This problem can be overcome with very powerful indexing which will be possible with a videodisc based encyclopaedia. With the videodisc it will be possible to put the full index of the entire encyclopaedia on each disc making

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it relatively easy to look up the whereabouts of any particular subject at any time. The principal advantage of a topical organization is that it facilitates the ability of the user to study subjects related to the original topic of interest. This is important if the learner is to be able to derive as thorough an understanding of the particular area of knowledge that he is exploring.

Emphasis on How to Learn

Although the encyclopaedia would include full discussion of all topics, and would be useful for ordinary fact reference as well, the emphasis throughout would be on using the encyclopaedia to teach a child how to learn in the broadest sense. Not only how to find facts and information, but how to apply the scientific method to problems, how to put together pieces of an intellectual puzzle, in other words, how to think. For example, let's take the elementary physics principles of the lever, gravitation, an inclined plane etc. Using the capabilities of the interactive videodisc, it is possible to present this material in such a way that the user is encouraged to discover the meaning of these principles for himself. [There is no reason why there couldn't be] a motion sequence showing a humorous "Rube Goldberg" type machine. The program would tell the child that at various points in its operation the machine demonstrated the principles of the lever, an inclined plane etc. The child would be encouraged to view the machine in operation in slow motion to discover where each of the principles was

operating.

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Another example, this time in the area of animal behavior. It would be quite possible, using the ability of the videodisc to compress motion sequences, to actually simulate a field trip ^{trip} ~~can allow~~ where the child was asked to study for himself the behavior of a number of animals in their natural habitat. In the course of this exercise, the user would not only learn something about animal behavior, but more importantly, something about the skills connected with observation and the scientific method.

Full Use of Multi-media Capabilities of the Videodisc

The flexibility of the videodisc will enable the Compton Videodisc Encyclopaedia to present every subject using whatever media is most appropriate. Several examples are as follows:

- the orchestra will be discussed using a real orchestra, in full stereo to illustrate the points.
- sculpture will be presented in the round, enabling the user to actually "walk around" Rodin's THE THINKER, in order to see the piece in its full glory.
- the study of China will include an actual tour of Peking and a trip to the Great Wall.
- the section on automobiles will include a compressed motion sequence which actually shows the process of manufacturing a car from the smelting of the ore through the last coat of paint.

- Shakespeare will appear in person, reciting one of his sonnets and introducing a scene from HAMLET.
- the treatment of architecture will include not only a comprehensive catalog of examples, but a compressed motion sequence showing the process of raising a house or a skyscraper from the ground.
- the section on the law would include a visit to a courtroom, where the prosecutor and defense attorney could both make their case before the judge in a dynamic illustration of the components of the legal system.
- the discussion of plant physiology will include an animated explanation of photosynthesis.
- the culture of American Indians can be illustrated through motion sequences and color photographs.

What About the Text?

Even with the unprecedented "use" of "motion" pictures, animation, audio, and full-color photographic images, there will still be a considerable amount of text in the encyclopaedia. It is our opinion that the text should be right on the disc rather than put in a separate book issued along with the disc. Our reasons for this are as follows. First we think that it will be much easier for children to use the encyclopaedia if everything is on the disc. Having to flip back and forth between a book and a disc will be confusing. People are already getting used to reading text off a screen and by the time the encyclopaedia is

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available, this probably won't seem strange at all. (The OCLC Project 2000 test which included making the full text of the Academic American Encyclopaedia available via Viewdata, reported that only 13% of the participants found reading text on the TV screen tiring.) Also, we think a serious problem might develop if you had the text portion all by itself in a book which would look rather dry and uninteresting when contrasted to the bright, dynamic appearance of the videodisc. The relatively poor resolution of today's televisions limits the amount of text that can be put on the screen at any one time to approximately _____ characters. While even this low figure can be worked with successfully, if necessary, it is possible that there may be one or two developments in this area while the encyclopaedia is being developed. First, it is possible that within the next five years higher resolution television will become a reality in the consumer market. Even if this doesn't happen, however, it is quite likely that there will be strides made in improving the quantity and quality of text that can be included within the limits of today's low resolution receivers. Work at MIT in the development of a serifed, book-type font for video is very promising in this regard.

On the Question of Computer Programs

There are a number of subjects which could certainly be presented better with the addition of a computer program. For example, geometry will certainly benefit from the ability to give animated explanations of geometric principles. However, it

could be even stronger if in addition there could be a computer program which tutored the user in the working out of geometry problems. Similarly, the treatment of chemistry could certainly be strengthened if the child could use a computer program to simulate the mixing of various compounds; to learn chemistry by doing chemistry. The examples are hardly limited to the sciences either. An intelligent computer program could certainly function as a Socratic teacher, guiding the user through the complexities of economic theory. Our only reason for not suggesting that the Compton Encyclopaedia be an "on-line" encyclopaedia as we are suggesting for the Britannica itself, is the realities of the marketplace. It is not likely in the next 5 to 10 years that there would be enough homes with a videodisc and computer to justify two such products. Since the Britannica must be on-line (to be explained below) it makes sense to consider putting out Compton's in videodisc form, since there will certainly be a significant number of homes which only have videodiscs in the 5 to 10 year range. Also, as an encyclopaedia aimed at children, Compton's does not have as intrinsic a need as the Britannica to be completely up-to-date.

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However, having said this, we would like to suggest that plans be made to include appropriate computer software with the Compton Encyclopaedia, for those families and institutions that could take advantage of it. This could be done in two ways. First, if it becomes possible to encode significant amounts of digital information directly on the videodisc (to be 'read' by a microcomputer) it would make sense to include the computer

programs right on the disc. People who had a computer capacity would be able to access the programs. Those without a computer would not be affected, since the programs could be stored on available audio track. Or if you wanted to sell the encyclopaedia containing the computer programs for more money, it would be possible to sell a disc with the computer programs, and one without. It is even conceivable that programs for various computers, eg, Apple, Pet, TRS-80, could be stored in different locations, making it possible to master only one disc for all three systems. If, however, it is not going to be practical to put digital information right on the disc, it would make sense to sell floppy discs containing the computer programs to people who wanted to purchase them as an option.

Cost and Time-frame

It is estimated that an effort as described would cost in the neighborhood of 25 to 40 million dollars, and take approximately 7 years to complete. The lower figure is for an encyclopaedia without computer software, the higher amount reflects the high cost of elegant programming.

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How Production Should Be Organized

1. differs for different programs; for actual pattern of disc production, see appendix; this section deals with organizational relationships

2. single-topic programs - probably makes sense to farm them out;

a) can get best people that way; will be able to assemble best team for each production; becomes important when actual production is so complex, involving both subject experts and media experts etc. (analogy with book - program = manuscript); (fee or fee + royalties, depending)

b) don't have to make big investment in in-house production etc. (some estimate of the costs involved); some assessment of EBEC's ability to perform this function (how well equipped are they to become an in-house production "company" for interactive video programs)

can keep overall editorial control even if production is farmed out; have one trusted person on EB staff who is very familiar with goals of EB, whose job it would be to oversee productions, working with "production" company/ies to make sure that product lives up to EB standards; this person's role is analogous with that of book editor

probably makes sense to work with one production company with the understanding that they would assemble a team for each program as it was produced (as described above); this makes sense because of the importance of the production company learning what a good videodisc program is by EB standards; also problems of coordinating and overseeing productions from EB's point of view, will be far less if

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BRITANNICA

A fully electronic edition of the Encyclopaedia Britannica was not originally going to be part of our report. However, as we proceeded in our investigation it became clear that an electronic encyclopaedia as described below was quite feasible and that a sufficiently large market for it will exist long before a project of this magnitude could be completed. Since we believe that this is unquestionably the direction that the Britannica will need to move in, we decided to address it at this time.

As discussed in the introduction, we think that with the sharp rise in the quantity of information and the complexity of knowledge, there has been a corresponding increase in the need for a powerful reference work; one that permits people to enter the domain of knowledge at many different levels and from many different directions. The basic thrust of the Britannica will continue as in the past, combining the two functions of reference work and educational instrument. In fact as we will see below, the transformation of the Britannica into an electronic encyclopaedia will enable it to perform both aspects of its task much better, and eradicate a lot of the problems that develop when trying to "be two things at once" in a static print medium.

The Britannica of the future will exist as a combination of on-line computer materials and interactive videodiscs. The text of the encyclopaedia will be on-line; as will the various computer programs that will become an integral part of the

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encyclopaedia in many subject areas (eg. algebra, chemistry, physics, electronics, etc.). The visual and audio components of the encyclopaedia will be on videodisc; the discs themselves will be driven or directed by the computer.

Reasons for Going On-Line

1. Only a computer with a very sophisticated search procedure will be able to give the user the kind of power over the subject matter that is necessary, given the breadth of the materials and the varied requirements of the user. The introduction to the Propaedia of the current EB describes the three ways that people use the encyclopaedia. The first use is for fact reference where the reader is interested only in a discrete piece of information like the size of a sperm whale or the feeding habits of the robin. The second is where the user may turn to an encyclopaedia for information about a broader, but still relatively limited subject, the causes of the Vietnam War, how interest rates can be used to control the volume of currency in circulation etc. Third, readers may on occasion be interested in the whole sweep of human knowledge, an understanding of how the many disciplines relate to a coherent whole. EB 3 is a magnificent attempt to present the entire circle of learning in a format that would facilitate the user's ability to enter the encyclopaedia at which ever of these three levels was most appropriate. In fact, the average user has experienced considerable difficulty finding his or her way through the materials. (This conclusion was unanimous among the

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dozen or so librarians that we spoke with. While they have tremendous respect for the overall content of EB 3, they say that in practice having the material on a given subject spread over at least three volumes, corresponding to the three different levels described above, has proven quite cumbersome to work with. It is also their unanimous opinion that the indexing system is not powerful enough for the complexity of the presentation.)

If the entire text were on-line, with a sufficiently elegant index and search procedure, many of these problems would be alleviated, and the goals of the Fifteenth Edition could come much closer to being achieved. With the text on-line, the computer will do the job of coordinating searches on the various levels of the encyclopaedia. The ability to travel at the touch of a few keystrokes to any destination within the whole encyclopaedia will make the encyclopaedia a far more attractive and useful tool. What in the medium of print caused a problem - the confusion and cumbersomeness associated with presenting the subject matter at various levels of organization - will prove in an on-line system to be a welcome development.

For those who may be familiar with the NEXIS/LEXIS program, it is necessary to say here that what we are envisioning will go way beyond NEXIS/LEXIS in terms of the ability of the user to focus the range of his search in the database. For an on-line encyclopaedia to be able to do the sorts of things that we have described, it will be necessary to employ a much more sophisticated query system than the one used by NEXIS/LEXIS.

2. With an on-line encyclopaedia it will be possible to continuously update any materials, without the complicating and costly necessity to reprint an entire volume of a book. In connection with this, an on-line encyclopaedia will permit immediate user-feedback, via the computer. The user will be able to comment on content, style, usefulness, new subjects etc. The ability to receive this type of feedback will result in a much stronger product.

3. The economics of an on-line encyclopaedia are such that a much higher percentage of the actual cost of the encyclopaedia will actually go to the creation of the editorial content than was ever possible with print materials which require printing, shipping of a heavy product, warehousing etc. Of course there are costs involved in the maintenance of an on-line database but they are in no way equivalent to the costs of book production. (if possible, come up with a chart comparing the corresponding costs discussed here)

4. An on-line encyclopaedia will permit changing the whole structure of income from the encyclopaedia in a very attractive way. Because the heart of the encyclopaedia will be on-line and continuously updated, it will not make sense for people to "purchase" the encyclopaedia. It is a dynamic product, undergoing changes all the time, and it will not be possible to freeze time and buy the "1980 Edition." Presumably, people will subscribe to the Britannica, paying either a monthly or yearly fee and/or a per use fee. It will no longer be the case that

people buy an encyclopaedia once in their lifetime. In fact, they will pay for the use of the encyclopaedia as long as they are still actively learning, which is increasingly for a whole lifetime. The videodisc component of the electronic Britannica would be sold separately. The visuals would not go out of date as often as the text, which means that people would not feel they have to have the latest discs in order to feel that they had a current "edition" of the Britannica.

Since much of the discussion so far has been in terms of the current encyclopaedia, it is perhaps necessary to emphasise that what is being proposed here is NOT simply a repackaging of the current EB. At this point, we will describe in greater detail the content and organization of the electronic encyclopaedia.

in the future the Brit
should consist of a
series of modules available
either online or on CD
and people can see to
what extent they want to
and how much work
is involved

INTRODUCTION OUTLINE

1. Statement of task - to advise the Britannica on entry into video publishing and electronic media markets

comparison of active and reactive approach

reactive - new technologies are here, how can we fit in -
motivated principally by fear of being left
behind.

active - steps back, looks at whole world - what's going
on, what's needed, how to go about accomplishing
what's needed, then look at role of technologies
in achieving goals

reactive - tries to fit EB into already existing (not
necessarily very imaginative or forward looking
mold, mainly repackaging of old materials in
sexier package

active - suited to a leader in the field (especially the
educational field, where there is some social
responsibility ~~not~~ involved, need to consider long
term needs of society) - active approach leads to
much greater potential contribution - in fact
much greater chance of [making the new
utilizing unique possibilities of new techs
technologies count for something]

quote from Britannica about the patterns of encyclopaedia

production following the changing social needs of the age

2. How the world is changing.

assumption of democratic ideal - educated citizen, needs to be educated to the age, the world is a different place today

200 years ago, people lived within a much smaller radius, village, city, region; day to day living was relatively transparent; a person could see how things operated,

(e.g. the horse and buggy or horse and plow as contrasted to the modern automobile or tractor, or the process of making shoes today as compared to the old time shoemaker; events around the world were of comparatively little significance

(town meeting a possibility under the conditions of 200 years ago - it was possible for people to be aware of everything that was going on locally, processes of daily life were there for all to see, making it possible for most to take an active and informed interest in affairs)

world today is quite different; as science has progressed, the processes governing our daily lives are now quite complex and in most cases, invisible or incomprehensible to

CIVILIZATION OR SOCIETY? IS IT JUST SCIENCE OR Tech?

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all those but the specially trained.

the development of mass communication and has made the world a much smaller place, such that the events in one place can often seriously effect life 1/2 way around the world; the term "global village" has meaning today; to be educated today (to be able to participate in the affairs of society) means something quite different today. the world is more complex and in order to be active and effective citizens in the global village, it is necessary to know much more across a much wider spectrum.

3. People need to be Smarter

need to develop competency over a much large and complex body of knowledge (not speaking here of the gap between the educated and the uneducated, which is a pressing social question, but the question of what it means to be educated in today's world)

need to learn how to navigate in knowledge land; Molnar's quote about the need to turn data into info, info into knowledge etc.

children need to learn how to learn, a lifetime of learning ahead of them; adults need to be able to master diverse subject matter

having accepted this as a goal, the q. becomes how to achieve it;

-learning how to learn

-importance of individual going through process of recreating knowledge; as the most effective way of learning (old ~~phrase~~ of not needing to reinvent the wheel is only partly true)

-choosing proper tools; most today are outdated; teaching 20th century subject matter with 15th century tools

Present Technologies

Books - What is impt about a book is that the reader has total control over the rate and sequence in which the content is accessed - not that it consists of print on paper -- the new technologies will preserve and strengthen virtually all of the best aspects of the book.

TV - paradox that as people need to be getting smarter, there are indications that they are in fact getting dumber. TV gets blamed for a lot of this - Sesame St. argument, passivity argument. Point that people suggested that TV would be a saviour as far as education goes.

computer - awesome powers to manipulate information, again as with TV there were vastly overrated statements to the effect that the computer was to bring about a virtual revolution in the area of education, a revolution, that at least until recently, has not materialized

(I think the point here was to get into how TV has taken a bum rap, as a cover for the present curriculum and educational system; the thrust however has gotten into the question of why TV (and computers) have not lived up to promised expectations; this might be the correct approach to take, but some counter to the Sesame St argument must be made here)

why tv and computers have failed to live up to promises - with tv it is mainly a question of the content and the passivity built in to the broadcast medium as it has existed until now; with the computer it has mainly

been

only been
for exploring bodies
for cultural

developments that

lead us to say that these technologies have come of age for use in the field of education and reference. interactive videodisc, microcomputers, natural language query systems, and vastly larger memories at ever-lower

costs.

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Possibilities for the Britannica/ Role of the Britannica

oppty for Britannica to make a major contribution; marshall forces to produce a really modern educational tool - (in contrast to all the mentions of the Britannica in the articles on new technologies, which in most cases amount to little more than putting out the current materials in a slicker package; not using the new techs to make something new) -- The Britannica is one of the few organizations that could successfully undertake the task; combination of reputation and resources, both editorial and financial if EB takes up the challenge there are significant rewards in terms of new markets and patterns of distribution that could be very important in terms of strengthening the

Britannica's position in the coming period and for a long time to come

(what is missing here of course is the whole discussion of the particular niche that the Britannica could fill - ie. what are the implications of what has been said about the way the world is etc. for what an encyclopaedia should be (and could be; given current technology). some discussion of the difference between information and knowledge; analogous with distinction between reference and educational functions. (all the talk about the

wonders of the computer and talk about how every home will have instantaneous access to all available information. The problem is "that access to greater and greater quantities of information as such shouldn't be equated with the ability to understand that information; that is with the ability to process it in such a way as to make it useful in problem solving (for example.....). The unspoken assumption is that the computer will make each person capable of becoming the "renaissance man" of yore who was capable of moving comfortably between many different disciplines. In fact, there is no reason to expect the computer to do this just because it gives people access to gigantic data bases. Giving people access to information, by itself, will not insure that they will be able to raise that information to the level of knowledge. Put another way, letting someone into the library does not insure that they will be able to get anything out of the experience.) Two possible directions, one which emphasizes reference function, one which emphasizes education function. Think most important, and the one the Britannica should go for is the educational. Articles, whether they be in familiar text form, interactive visuals, or computer programs, should aim not mainly for comprehensiveness (in the sense of including everything on a subject) but for "educativeness" in the sense that the special attention has been paid to the effectiveness of the presentation in enabling the user to gain an entry level understanding of the subject matter. Take for example, the subject of electricity, the aim of the Britannica should not be principally to include

all the points about the development of electricity from its "discovery" to the present, as much as it will be EB's responsibility to present the subject in such a way that someone who knows nothing or relatively little about the subject to be able to get enough of an understanding to start to be able to integrate that understanding into his own cognitive structures.

Put another way, the task of the encyclopaedia will not be so much to make sure that all conceivable formulas are in the article, but that the user will actually be able to understand the basic; understand them on the level of functional, useable knowledge - knowledge that can be used to go further. Up-to-date bibliographies will become of paramount importance.

As our understanding of nature develops, it will become increasingly difficult for individual people to know more than a teeny fraction of all that is known -- however this doesn't mean that people will have less of a need to have a broad understanding -- in fact you could argue just the opposite. A dynamic encyclopaedia that undertook the responsibility of providing a window for any individual into the growing landscape of information and knowledge would enable people to cross strict-disciplinary lines and find their way amidst the ever-widening expanse.

NEED to figure out exactly what the thrust of this section is going to be, quite muddled now, as it vacillates between two somewhat different points and does that confusedly - the two

points being a) the world has changed and so must the educational tools like encyclopaedias and b) it becomes necessary to look carefully at how one is to use the new technologies; impt of not confusing info with knowledge, role of the Brit. within this is principally in the area of knowledge - two thoughts 1. both points must be made, probably in that very order and 2. have to find some way to make the distinction between the reference and education function which doesn't seem to say reference is no longer important as an aspect of the encyclopaedia; must sharpen up the point being made about the difference and show better how they are related.

to do

mood of the masses - transition from anti-technology and fear of computers. (a la Spencer Tracy - Katherine Hepburn movie) to one of actively embracing - in the rush to jump on the bandwagon many companies (and individuals) are producing all sorts of junk, either unimaginative reformatting of existing materials (the traditional textbook reborn as a computer program) or contentless . (this is often a product of seeing the technology as the answer, rather than the opprties presented by the technology to present subject matter in a more powerful, effective way "if it's on a computer it must be good," or "if it's a zippy video production it's bound to be effective with kids.") In fact the usefulness of the new technologies will be a direct function of the quality of the software produced for them. This is where the importance of the Britannica can come

in; an organization committed to
excellence.-

JOINT VENTURES

should look to joint ventures for 3 reasons

1. spread the financial risk
2. get more \$ to do more and better programs and therefore have stronger market impact - not an insignificant point
3. team up with partner who can provide something you don't have - for example, experience in film and video production (eg. CTW, Lucasfilm, CBS,); an especially large library of stock footage and photos (Time-Life, NGS); or significant distribution capabilities (eg. CBS, VHD, MCA etc.)
4. summary of specific discussions with VHD, MCA, ABC, etc. terms they are interested in, our recommendations etc.

5. possibility of going into actual distribution and the types of joint ventures that would be appropriate - any discussions that may have taken place.