The Potential of Film Production as an Educational Tool in Japan

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Abstract

Currently, a much discussed education topic in Japan is the cultivation of 'capable individuals'. However, such cultivation methods have not been defined in terms of academic ability beyond broadly sketched guidelines. Research studies are therefore currently grappling with specific educational methods for achieving this goal. The present study considers the effectiveness of film production as a means of cultivating the promise of an individual. An affinity exists between the objectives of education in the arts as indicated by Herbert Read and current educational goals in Japan. Furthermore, connecting film production with the collective wisdom discussed by Scott Page has applicability as a method of developing the skills required for formation of a capable individual. Experimental educational practices based on such knowledge have revealed glimpses of how useful film production can be, under certain conditions, as a means of cultivating 'capable individuals'.

Keywords: film production, issues in Japanese education, arts and education, collective wisdom

1. Introduction

Film production is a group endeavour. Moreover, filmmaking work is distributed among the group according to specialties in the characteristics of modes of expression. A film is an artistic act, the achievement of a process in which the fruits of these separate efforts come together to complete a single product. Read's concepts of knowledge can be used as a basic theory in studying filmmaking as an educational method. In 'Education Through Art', Read writes:

It is assumed, then, that the general purpose of education is to foster the growth of what is individuality in each human being, at the same time harmonizing the individuality thus educed with the organic unity of the social group to which the individual belongs. (1945: 8)

In other words, he asserts that education should include processes of individualization and integration. From this perspective, film production, as practical learning, is closely aligned with Read's views.

The affinity between film production and Read's perspective can potentially offer an effective resolution of the educational problems confronting present-day Japan. This paper demonstrates the effectiveness of filmmaking as an educational tool, apropos educational issues in Japan.

2. Education Issues in Today's Japan

Japanese higher education is concerned with cultivating 'the ability to ascertain a course towards the resolution of problems discovered when unanticipated circumstances are encountered'. Stated differently, this is also an issue for education from elementary through high school, and a concern for all Japanese education under present-day circumstances, where 'in a time of unforeseen challenges, local communities and industries look to capable individuals and the progress of academic research in bringing forth the future as the driving forces for the fundamental ability to cope with coming change and discovering paths to the future'.

In this context, in reference to 'capable individuals' the Central Education Council (2008) uses the term 'bachelor-level ability', defined as follows:

- Cognitive ability, beginning with critical and logical thinking for understanding complex issues, using knowledge and skills and to answer unsolved problems
- ② Moral and social capabilities, assuming social responsibility by fulfilling one's individual duties and exhibiting teamwork and leadership while showing consideration for others
- ③ Creative and planning abilities, based on general experience and continuing education
- ④ Education, knowledge and experience to form the basis for accurate decision-making in the face of unanticipated challenges

However, statements regarding methods for cultivating these capabilities

range from 'lessons that communicate and are infused with information for the future' to 'needing to switch to active learning whereby students independently discover and solve problems', but they stop there, doing nothing to further specify educational means of forming 'capable individuals', a problem now being undertaken in research (Central Education Council, 2008).

Read's concepts of knowledge are useful in studying means of cultivating the 'capable individual' that Japanese education seeks to bring forth, since there is much overlap between the goals of Japanese education and Read's view of education's function.

For example, regarding the new promotion of cultivation of 'capable individuals' in 2013, the Minister of Education, Culture, Sports, Science and Technology stated that 'an educational strategy to strengthen the abilities of graduates' would require 'strengthening individuals on a one-by-one basis, helping each to realize their full potential' and 'educating students who will support stability in a mature society and energize their local communities' (2013). This is very much in keeping with Read's idea of education – again, underscoring the close relationship between Japan's current educational goals and Read's views on education – and suggests that Read's thinking can be helpful in solving present-day Japan's education issues.

As we have seen, film production and the goals of Japanese education are both closely aligned with the idea, advocated by Read, of education through art. Next, we will look at the analogical relationship between filmmaking and Japanese educational goals through Read's concepts of knowledge. This paper will use this relationship to investigate the film production's utility as a method of

cultivating 'capable individuals'.

3. Knowledge Production Structures and Film Production Based on Collective Wisdom

First, before considering filmmaking as an educational tool we looked at the intellectual activities involved in film production. Scott Page, a researcher of complex systems, conducted a study on group-produced knowledge, which he has labelled 'collective wisdom' (2008). In this study, he compares cases of diversity and uniformity and verifies that diverse groups are best suited to solving complex problems. Page argues that even in cases where problems are so troubling that they perplex the most talented individuals, a solution can be found by combining the viewpoints, analyses, and proposals of diverse individuals. That is, collective wisdom brings forth required knowledge. Four conditions are needed for diversity to trump uniformity in terms of producing required knowledge:

- A: The problem is difficult
- B: The calculus condition
- C: The diversity condition

D: Reasonably sized teams drawn from many potential problem solvers (Page, 2008: 158–65)

 $\mathbf{5}$

These four conditions can be explained as follows:

A: The problem to be solved must be difficult as 'easy problems don't require diverse approaches'.

B: The members of the team (henceforth referred to as 'problem solvers') must have some ability to solve the problem.

C: There must be diversity among the viewpoints, analyses, ways of expressing ideas, and the knowledge and positions of members.

D: The initial pool of problem solvers must be reasonably large.

These conditions are useful, and diversity will function effectively, if the four conditions are satisfied, thus aiding the problem's resolution. Page argues that if these four conditions are met, a system of collective wisdom will operate and produce useful knowledge. If the team that forms the film-production workflow is viewed as a single organisation, then it becomes apparent that Page's four conditions, as shown below, are satisfied and that a mechanism in which the required knowledge is produced by collective wisdom is operating:

a) Make a film.

b) Team members have knowledge and skills that are useful in filmmaking.

c) Different team members have different roles in the films' production.

d) The number of team members is appropriate for the scale of the film/product.

In short, filmmaking involves collective wisdom's state of knowledge. In addition, we considered the abilities needed to produce a film and the distinctive features of production work and found the following points correspond with 'bachelor-level ability':

First point of correspondence:

Making a film from scratch is equivalent to addressing a complex and difficult problem. In other words, it fulfils 'condition A' required for the establishment of collective wisdom. Also, creating a film requires the use of certain knowledge and skills, such as operating production technology and expression techniques. In addition, it requires coordination between and integration of modes of expression that are worked on separately in the production process, and integration requires the exhibition of cognitive abilities, such as critical assessment skills, once a mode of expression has been understood, and the ability to think rationally in order to complete the project.

Second point of correspondence:

Film production is premised on group effort. Clear responsibilities and duties are assumed by the production group on the basis of a distributed workload. The group's goal in fulfilling these responsibilities and duties – i.e. the formation of collective wisdom inherent in the film's completion – requires demonstration of teamwork and leadership.

Third point of correspondence:

As discussed in the next section, the experience of completing a film is one of comprehensive learning. The actual work of film production is also of fixed duration, and in the course of producing a film one needs to maintain or acquire artistic creativity and imagination.

Fourth point of correspondence:

The movie 'Day for Night' (1973) and the documentary 'Lost in La Mancha' (2002) depict how 'unforeseen difficulties' occur during filmmaking, requiring one to possess or acquire 'the education, knowledge and experience' needed for completion.

As discussed above, correspondences between 'bachelor-level ability' and the skills needed to complete a film point to the fact that filmmaking requires one to obtain and demonstrate skills equal to bachelor-level ability. That is to say, behaviours performed in order to exhibit or acquire the skills needed to complete a film ultimately provide the learner with training in the skills of a 'capable individual'.

Thus, film production is useful as a specific means of cultivating the 'capable individual' that Japanese educators seek to bring forth.

In the next section, we examine methods of design, evaluation, and verification using Read's concepts of knowledge when filmmaking is used as an education tool for fostering capable individuals.

4. Evaluation and Verification of Educational Methods Using Film Production

Growth through practice, or its absence, is the starting point for evaluating and verifying education through the arts. According to Read, 'Education is the fostering of growth, but apart from physical maturation, growth is only made apparent in expression – audible or visible signs and symbols' (1945, 11). That is, when, through the production of a film, 'expression – audible or visible signs and symbols' is a product, or an expression based on conformance to a product, it becomes clear that learning is occurring, and evaluation and verification are possible.

The difficulty of learning with filmmaking as the object of evaluation or verification is that the work and expression of all individuals who contribute to the end result are fused together as collective wisdom. There is no problem in regarding the results of filmmaking used as a learning experience as the fruits of 'the organic unity of the social group'. However, when the 'expression – audible or visible signs and symbols' is a fusion of efforts, it can be difficult to easily see the growth of a particular individual (1945, 11). To address this problem, this paper uses Read's concepts of knowledge.

Read divided methods of learning through art into six categories: Visual education (EYE), Plastic education (TOUCH), Musical education: (EAR), Kinetic education (MUSCLE), Verbal education (SPEECH), and Constructive education (THOUGHT)(Read, 1945: 9). Dividing the work involved in filmmaking into

categories similar to Read's, using modes of expression as the criteria for classification, again applies each category to one of the arts (Chart 1).

| <educational approach=""></educational> | <type></type> | <film production=""></film> |
|---|---|---|
| Visual education | EYE | Shooting |
| Plastic education | TOUCH | Production design |
| | | Recording and sound |
| Musical education | EAR | effects |
| Kinetic education | MUSCLES | Performance |
| Verbal education | SPEECH | Script |
| Constructive education | THOUGHT | Editing |
| | Visual education Plastic education Musical education Kinetic education Verbal education | Visual educationEYEPlastic educationTOUCHMusical educationEARKinetic educationMUSCLESVerbal educationSPEECH |

Chart 1

How Read's method of education through art corresponds to filmmaking

Hinted at here is the potential for discerning individual learners' 'expression – audible or visible signs and symbols' in the fruits of learning through filmmaking (Read, 1945: 11). Using Read's concepts of knowledge, it is possible to view the completed film not as a fusion, but as an integration of six kinds of learning, or the fruits of separate areas of learning distributed into six kinds of work. This makes it possible to perceive, evaluate, and verify the 'growth of what is individuality' for each individual who participates via a work unit in the production of the film (Read, 1945: 8). In evaluating work divided across six categories, it is possible to use evaluation methods and perspectives that have been forged in educational practices through the respective arts, such as 'verbal education' for

'shooting' in the matching relationships shown in Chart 1.

Additionally, the accord between the classifications of educational methods described by Read, shown in Chart 1, and the work involved in filmmaking indicates film production's utility as an educational method.

If all of the expressive activities divided up during production apply to all of the methods of education through art, learning through filmmaking is a comprehensive learning experience inclusive of all elements of learning through art. This indicates that learning through filmmaking is useful in cultivating the 'capable individual' that is the goal of 'general experience and continuing education' (element 3 of bachelor-level ability).

Thus, given the type of knowledge and general experience that it engenders, filmmaking is an apt means of resolving present-day education issues.

5. Trial Studies Using Film Production

To verify the practical usefulness of the above ideas, the authors implemented certain experimental education practices between 2013 and 2014.

So as not to confuse the study with specialized studies in art, we opened a general subject course and solicited the participation of college students not attached to art departments to attend, in two groups of about thirty students per class.

In this study we set different conditions depending on the group and compared the results. For comparison purposes, the teaching staff communicated the same specific knowledge and made available the same filmmaking materials and equipment to each group. Also, the study was designed such that Group A's work emphasized individuals while Group B's work emphasized working as a group. The results of 'the organic unity of the social group' were perceived in the products created in the educational trials and studied comparatively (Read, 1945: 8).

In specific terms, the designs of the educational trials for Groups A and B differed as follows:

Group A Design: Emphasis on the Individual

Units of roughly four members were formed. All students assumed responsibility as creators of their projects. When there were four people in a unit in Group A, the unit produced four products. In short, this design approached the problem through the formation of groups bound by labour-bargaining relationships. Also, methods of working and holding discussions were left to each individual. The design of this educational trial thereby intentionally omitted Read's knowledge-based work and the establishment of Page's collective wisdom (Condition C).

Group B Design: Emphasis on Working Together

Units of roughly four members were formed. One product was produced per unit. Members were responsible for one of Read's knowledge-based work areas. In short, this design approached the issue through the formation of work groups with a single objective. These groups were encouraged to hold discussions on the status of individual work units. The design of this educational trial thereby intentionally included Read's knowledge-based work and the establishment of Page's collective wisdom (Condition C).

The progress of both groups is outlined as follows:

Teaching staff explain materials and modes of expression involved in film production to the students.

↓ Students prepare plans. ↓ Work is decided on within work units. ↓ Revisions are made to the draft plans. ↓ Production ↓

Completion • Film presentation

Differences between the final products of the two groups are plainly stated as follows. Group A had a certain number of finished products that differed in content from the plans that had been drafted. In Group A, just under 30% of the films produced and presented had content that completely differed from the

plans initially submitted. On the other hand, in Group B, where there were some instances of modification to plan details, the products presented were all in keeping with the plans initially submitted.

About 30% of the products of Group A were films with content that completely differed from the original plans submitted.

In short, nearly 30% of the students who participated in Group A had difficulty implementing what they had imagined (producing the films they had planned). It appears that a certain number of students in Group A, when confronted with condition 1 of bachelor-level ability, to 'find answers to unsolved problems', left the problem unsolved and chose to switch to an easy topic. As stated in section 3, film production is very prone to circumstances giving rise to 'unanticipated challenges' (condition 4 of bachelor-level ability) and 'unsolved problems' (condition 1). Based on this fact we can assume that Group B encountered the same types of difficulties as Group A. However, switching topics was not a behaviour observed in Group B.

The difference between the two groups was in the trial design. In short, unlike the design of Group A, the design of Group B enabled mastery of methods for solving 'unanticipated challenges' and 'unsolved problems'. These educational trials suggested that when the elements included in Group B are present – performing Read's knowledge-based division of work and clearly including circumstances enabling construction of collective wisdom based on Page's conditions – film production makes it possible to train students in the mastery of skills necessary for 'capable individuals'.

As we have seen, filmmaking and the educational goals of present-day

Japan are in close accord with the perspective of education through art, advocated by Read. By underscoring Read's and Page's concepts of knowledge, filmmaking can be one way to achieve the goal of Japanese education.

6. Summary

Film is art. Artistic expression is at the heart of Read's theory of education, a lynchpin of this paper. However, it is clear from Read's statement, 'We no longer seek to pick out a few children with what used to be called an artistic temperament, and educate this minority to be artists', that the aim of his theory of education through art was not to create artists (1966: 7). The same is true of the education through filmmaking this paper imagines. Film is art, but it is able to go beyond the framework of art to effectively cultivate the 'capable individual' aimed for by Japanese education. This paper has focused on the analogical relationship between this goal and Read's concepts of knowledge, and attempted to demonstrate, through that point of focus, filmmaking's potential to teach skills required of capable individuals.

However, not just any educational trial using film production is specifically appropriate for fostering capable individuals' growth. In designing the use of film production for such a purpose, one must use Read's proposed educational method of the six categories for the distribution of work assignments. In addition, as the educational trials related in this paper demonstrate, it is also important to intentionally incorporate into one's design adequate conditions for the

establishment of collective wisdom using Page's concept of knowledge.

Education using filmmaking may initially seem to be a vehicle for learning artistic expression through film and photography, but using Read's concepts of knowledge in education through art, film production can go beyond the bounds of art to become a means of achieving goals embraced by Japanese educators today.

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