CoREF, The University of Tokyo

message

Learning is
changing our own way of thinking.

We all need to become aware
through interactions with others.

We do not yet know the true wisdom of ourselves.

We do not know how to make people really wise,

because
we have never properly looked at
the process of becoming wise.

Now, look by look,
the process by which people develop themselves
through thinking about themselves,
has become possible to see in detail.

From here, a new science of learning begins.

We really like to think by ourselves.
We remember for a long time
and are able to develop by ourselves
what we had thought up by ourselves.

Love a lot.
Make a friend who thinks.
Seeking new learning

Today, schools need to instiltransferable abilities through which individual learners are able to continue their course of thinking throughout their lives, and to make full use of these thinking skills for the rest of their lives. EFL provides the means to develop such nonoblivious abilities using collaborative problem-solving tasks.

Collaborative problem solving

People are social beings and whether we like it or not, life is cooperative work. To coordinate well and effectively, we might be trained in group solutions or mental exercises. If we are not sensitive to the environment around us, we may not be aware of the importance of the problem-solving process. And, mental exercises do not precede the work of thinking. If we are not aware of the importance of the problem-solving process, it will be very difficult to solve problems collaboratively in our future as responsible citizens.

The 21st century skills

We believe that 11th century skills for intellectual abilities are essential to the professional world. People are required to be flexible and cooperative in the professional world. People familiar with the skills are society today. The ability to think in terms of information and data, and to use them flexibly, is essential to the professional world. The number of students who are familiar with these skills is not enough.

ICT literacy

ICT is an area of all learning. People have been taught to think in terms of information and data. The ability to think in terms of information and data is essential to learning. The ability to think in terms of information and data is essential to learning. Learning can be improved through ICT. In collaborative problem solving, learners are taught to think in terms of information and data. Multicultural students need collaborative thinking processes. People need to cooperate in terms of information and data. People need to cooperate in terms of information and data. People need to cooperate in terms of information and data. People need to cooperate in terms of information and data. People need to cooperate in terms of information and data. People need to cooperate in terms of information and data. People need to cooperate in terms of information and data. People need to cooperate in terms of information and data. People need to cooperate in terms of information and data. People need to cooperate in terms of information and data. People need to cooperate in terms of information and data.
Knowledge Constructive Diagram Method

1. **Conceptual Model**
   - Identify the core concepts and their relationships.
   - Use diagrams to visualize the structure.

2. **Information Sources**
   - Gather data from various sources.
   - Include literature, expert interviews, and case studies.

3. **Analysis**
   - Analyze the data to find patterns and insights.
   - Use tools like matrices or networks to represent relationships.

4. **Integration**
   - Combine insights with existing knowledge.
   - Develop a comprehensive understanding.

5. **Implementation**
   - Translate insights into actionable strategies.
   - Use the model to guide decision-making and planning.

6. **Evaluation**
   - Assess the effectiveness of the model.
   - Provide feedback for continuous improvement.

By following these steps, you can construct a model that is both informative and actionable. This method is particularly useful in complex problem-solving scenarios, where understanding the interplay of various factors is crucial.
Collaboration with the boards of education

At elementary schools and lower secondary schools

Collaboration projects with the municipal boards of education in each region are being implemented. By providing support and advice on educational issues and practices, the projects aim to improve the quality of education and learning while taking into account the unique characteristics of each region.
At an upper secondary school

Collaborative project with a professional board of education. Title: ‘Industrial frontrunner project’

In the future, the focus will shift from traditional classroom learning to project-based learning. The project team will work closely with the professional board of education to ensure that the project is implemented effectively.

Collaboration with Saitama Prefectural Board of Education

Collaborate with the Saitama Prefectural Board of Education to enhance the overall educational experience. The project requires the involvement of schools in the Saitama region. The initiative is to be implemented in 10 schools, with a total of over 200 students. The aim is to improve the educational environment and prepare students for the future.
Toward new models of Connection among High school, University and Society

High school students, university and society need a new model of communication that can bring them into the future world.

A new type of upper secondary school-university collaboration

In the near future, in terms of our society, there is not only a need for the expansion of upper secondary school collaboration, but also for the establishment of a new model. The traditional school-university collaboration model is no longer able to meet the needs of our society. Traditional models fail to adapt to the changes in our society. Therefore, we need a new model of collaboration that can better meet the needs of the society.

Network of networks

People living in various networks such as the neighborhood, school, company, and even the political system. The number of people who are living in networks has increased significantly. People can be connected through various means such as email, social media, and cell phones. The network of networks is a concept that describes the interconnection of various networks. People are no longer limited to the traditional networks, such as family, work, and school. They can connect with people from all over the world through various means.

New assessments

Assessment is an important part of education. It plays a key role in evaluating the learning outcomes of students. In the past, assessment was based on traditional methods such as tests, quizzes, and exams. However, these methods are not able to fully evaluate the learning outcomes of students. New assessment methods need to be developed to meet the needs of the society.

Conclusion

In conclusion, we need a new model of collaboration between high schools, universities, and society. Collaboration can help bring people together and create a better future for everyone. The network of networks is an important aspect of this new model. New assessment methods need to be developed to meet the needs of the society. The establishment of this new model is an important step towards creating a better future.
Collaboration with the boards of education

At elementary schools and lower secondary schools

Collaborative projects with the municipal board of education. We have been actively engaging with local educational authorities in various municipalities. For example, in cooperation with the Saitama Prefectural Board of Education, we have been conducting workshops for teachers and students on various topics such as mental health awareness and digital literacy. These initiatives aim to foster a more inclusive and supportive learning environment for all students.

At an upper secondary school

Collaborative projects with a private board of education. We have been working closely with a private school to enhance their curriculum and teaching methods. Through regular meetings and workshops, we have been helping to develop new teaching materials and strategies that focus on promoting critical thinking and problem-solving skills among students. This collaboration has not only improved the educational outcomes but also enhanced the professional development of the teachers involved.

Toward new models of Connection among High school, University and Society

A new type of upper secondary school/university collaboration

In our school, we have been exploring a novel approach to higher education by establishing a unique model of collaboration between secondary schools and universities. This initiative is designed to complement the existing system by providing a more diverse and flexible learning experience for students. We have partnered with several universities to offer specialized courses and programs that are not available in our school. This not only enriches the educational offerings but also allows students to connect with a wider network of experts and professionals in their field of interest.

Network of networks

People belonging to various networks such as friends, colleagues, acquaintances, and communities, can form a network of networks. This can be a powerful tool for sharing knowledge and resources. By building connections with others, you can gain access to a wide range of opportunities and insights. The key is to be open-minded and proactive in seeking out new connections, both in your personal life and in professional settings.

New announcements

Changes in the school curriculum and teaching methods have been announced. This includes the introduction of new courses and the adaptation of existing ones to better meet the needs and expectations of our students. We are also exploring the integration of technology and digital tools to enhance the learning experience. These changes are designed to equip students with the skills and knowledge they need to succeed in the rapidly changing world of work.

Collaboration with the Saitama Prefectural Board of Education

Collaborative workshops and seminars have been conducted with the Saitama Prefectural Board of Education to enhance the teaching and learning outcomes at our school. Through regular meetings, we have been discussing strategies for improving student performance and addressing any challenges faced by teachers. Our goal is to create a supportive and inclusive environment that fosters academic excellence and personal growth.

A new type of upper secondary school/university collaboration

We have successfully established a unique model of collaboration between secondary schools and universities. This initiative has been well-received by both students and faculty, and we are continuing to explore new ways to expand and enhance this relationship. Through this partnership, we are able to offer a range of opportunities for students to gain valuable experience and develop critical skills. The collaboration has also provided us with valuable feedback and insights into best practices in education.

Network of networks

The concept of a network of networks is becoming increasingly relevant in today’s interconnected world. By fostering connections with a variety of people and organizations, we can access a wealth of resources and expertise. This can be particularly beneficial in fields such as entrepreneurship, where having a diverse network can be a significant advantage. The key is to be proactive in seeking out new connections and maintaining strong relationships with those we already know.

New announcements

There have been several recent changes to the school curriculum, including the introduction of new courses and the adaptation of existing ones to better meet the changing needs of our students. We have also implemented new teaching methods and strategies to enhance the learning experience. These changes are designed to equip students with the skills and knowledge they need to succeed in the world of work.

Collaboration with the Saitama Prefectural Board of Education

We have been collaborating closely with the Saitama Prefectural Board of Education to enhance the educational opportunities available to our students. Through regular meetings and workshops, we have been discussing strategies for improving student performance and addressing any challenges faced by teachers. Our goal is to create a supportive and inclusive learning environment that fosters academic excellence and personal growth.

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Future expansion

Forms of collaborative training

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<thead>
<tr>
<th>Half-day training</th>
<th>One day training</th>
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<tbody>
<tr>
<td>New learning principles introduced mainly through experiencing the Knowledge Constructive Jigsaw method as students.</td>
<td>New forms of learning introduced and experienced during the morning as students, and lesson making and assessments experienced in the afternoon as teachers.</td>
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Four-part training in one year

May: Understand the principles of the Knowledge Constructive Jigsaw method and try out two existing teaching materials as students.

June: Create an image of a lesson plan based on existing teaching materials and the experiences of senior teachers. Each participant tries teaching once after the training.

October: Compile the results of the teaching practices and examine the lesson design based on the learning records. Find a hypothesis for the creation of the next lesson. Teach again afterwards.

January: Examine the lesson design using the records of learning outcomes and processes. Organize a lesson design hypothesis which was discovered from two cycles of lesson design, teaching and reflection.

Course on learning sciences and lesson planning led by the University of Tokyo

Once a year training

Members of the collaborative boards of education and schools, and other working professionals gather at the University of Tokyo and hold a workshop on the learning sciences and lesson planning. Going beyond school types and occupations, we review “the actual processes of children’s learning” so as to create lessons for the future.

Once a month training

Classroom teachers who have been recommended by the boards of education regularly gather at the University of Tokyo about once a month, and learn about the learning sciences to promote lesson planning. After returning to their schools and putting their knowledge to practice, they share and examine the results of the teaching practices. Started from small networks of teachers, it has been expanded to multiple large networks.

Creation of practical learning sciences in collaboration with the global learning sciences bases

We will be forming a new base for practical learning sciences which strengthen practical approaches in collaboration with the world’s leading research centers of the learning sciences such as LIFE Center at Stanford University, OISE at Toronto University, TELS at University of California Berkley, Hong Kong University, Singapore Nanyang University, and the Pearson Group.

CoREF portal site

https://coref.u-tokyo.ac.jp/

If you would like to know more about our activities, please visit the CoREF portal. The CoREF portal provides various resources including “Collaborative Learning Resources”, that you can refer to when creating lessons based on the Knowledge Constructive Jigsaw method and “Todai Resources”, which summarizes the contents of educational support provided by the University of Tokyo. You can also read reports on past activities (the photograph is from the FY2013 edition), which summarize the outcomes of projects implemented in collaboration with CoREF and other organizations, including collaborative boards of education, and the ‘Lesson Design Handbook of Collaborative Learning’ posted on the portal.

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