

ICARE- BASED ICT INSTRUCTIONAL MODEL IN YUNIOR SECONDARY SCHOOL



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BACKGROUND

- ❑ **Indonesia Law 32, 2004 on Local Government: Shift from centralized to local authority.**
- ❑ **Indonesian Law No. 20/2003 on National Education System**
‘Curriculum is developed with diversification principles in appropriate with school level, district potency, pupils’ need
- ❑ **Governmental Law, No 19 2005 on Education National Standard**



(CONTINUE)

- ❑ ICARE is an innovative instruction model (lesson study –like) to support the implementation of Curriculum Developed by School Level (CDSL)
- ❑ ICARE is an instruction model that is an acronym for Introduction, Connect, Apply, Reflect, and Extend to give more chances to develop students capability in implementing ICT in daily life.
- ❑ This paper describes result of ICARE model using R&D.



EMPIRICAL DATA ON ICT IN SCHOOL SETTING

- In general, ICARE based ICT Instructional Model in Y Junior Secondary School (YSS) has not yet carried out properly. It does not support student life skills development on ICT.
- It seems that ICT instruction merely as practices on komputer skills rather than developing students capability in implementing ICT in daily life.

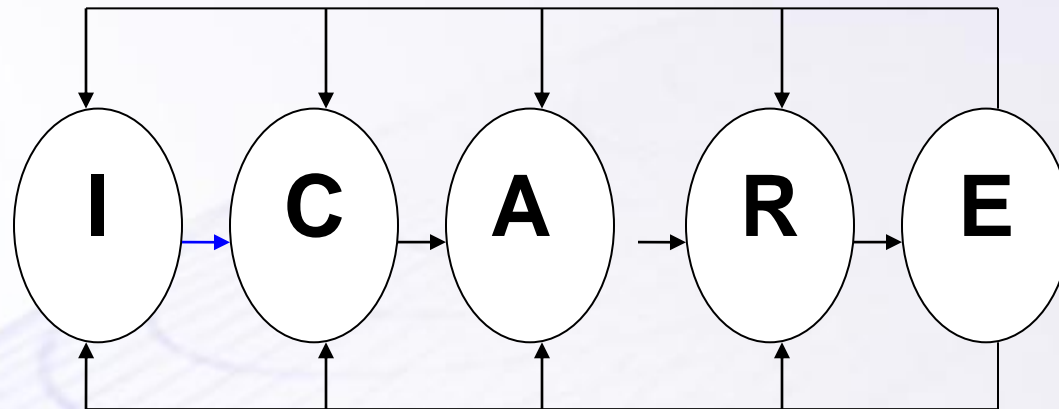


Can ICARE System improve ICT instruction in YSS?



ICARE INSTRUCTION SYSTEM

The **ICARE** system has been used and developed since 2000 by Department of *Educational Technology*, *San Diego State University USA*.



ICARE INSTRUCTION SYSTEM

ICARE IS AN ACRONYM FOR :

- Introduction,**
- Connect,**
- Apply,**
- Reflect, and**
- Extend.**

The ICARE framework is designed to help students make the most of online learning, and faculty develop effective online learning modules.



1. INTRODUCTION

There are two keys in introduction.

- ❑ **Context** or how the present material fits in the course as a whole.
- ❑ **Objectives**. Clearly stated objectives are a must for three reasons : (1) to clarify learner expectations; (2) to keep the material focused; (3) to reference later in evaluating student outcomes.



2. CONNECT

Connect means presenting new information. There are 4 important ways to structure content.

- ❑ **Information chunking.** Concepts should be broken down into small chunks.
- ❑ **Contextualize.** This means making learning meaningful to students by relating materials to real-world activities.
- ❑ **Prior knowledge.** Consider what students may already know and provide way for them to quickly focus on new material.
- ❑ **accomodate learners.** Represent the material in several ways to enhance visualization and comprehension. This can be done by using illustrations, graphs, diagrams and visual,etc.



3. APPLY

- ❑ Engage students in an active learning process with a real-world problem relevant to the academic needs of the course. This may be on on- or off-line activity.
- ❑ You may embed an interactive activity on the page itself or send learners off to another site for a relevant practice.



4. REFLECT

- ❑ Help students organize their thoughts about what they have just learned by providing an opportunity for them to discuss and expand on the information.
- ❑ This can be done in several ways. Discuss the information on a class, or ask students to create a concept map.
- ❑ A concept map is a useful tool to help students expand on new information.



5. EXTEND

- provide enrichment activities for students who have mastered the content and remediation exercises for those who have not.
- evaluate in two ways. (1) based on your original objectives, what have your students learned? One way to evaluate this is by giving students a test or quiz. (2) evaluate the module itself for design, navigation, and content.



CHARACTERISTICS OF ICARE MODEL

- Based on student needs based.**
- Planned and implemented with the spirit of contextual learning**
- Considering prior knowledge**
- Engage student with active learning.**
- Provide enrichment activities and fruitful reflection**
- Internal School Condition: teachers competency, school facilities, school committees, parents (social, culture, and economic).**



Method of Research on ICT ICARE Model

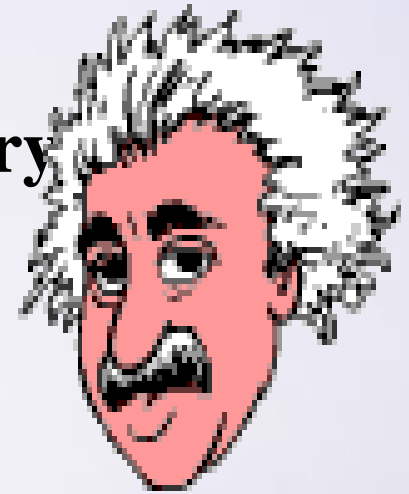
Using Research&Development

Procedures :

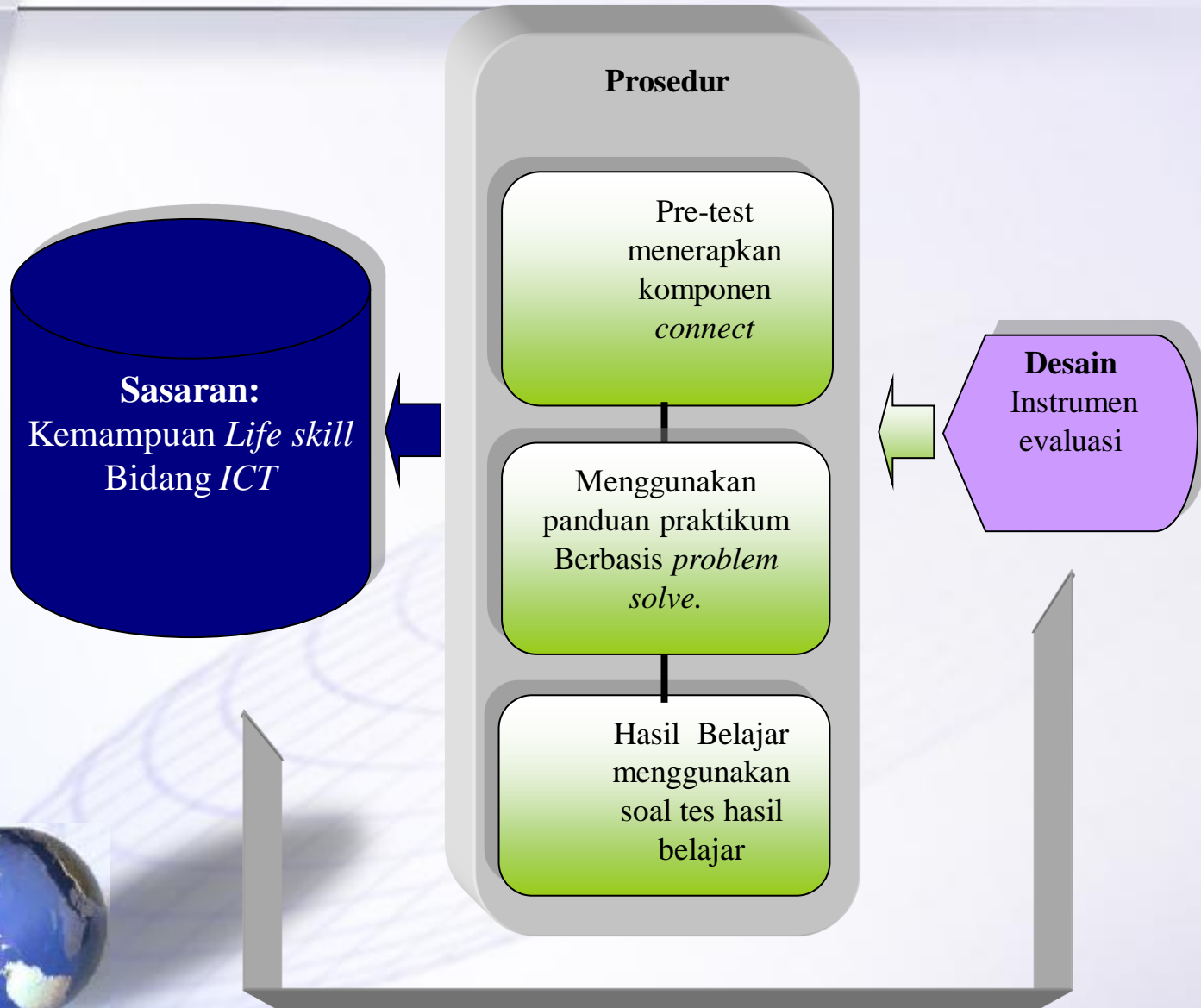
(1) Prasurevey

(2) Model Development and Field Try
Out

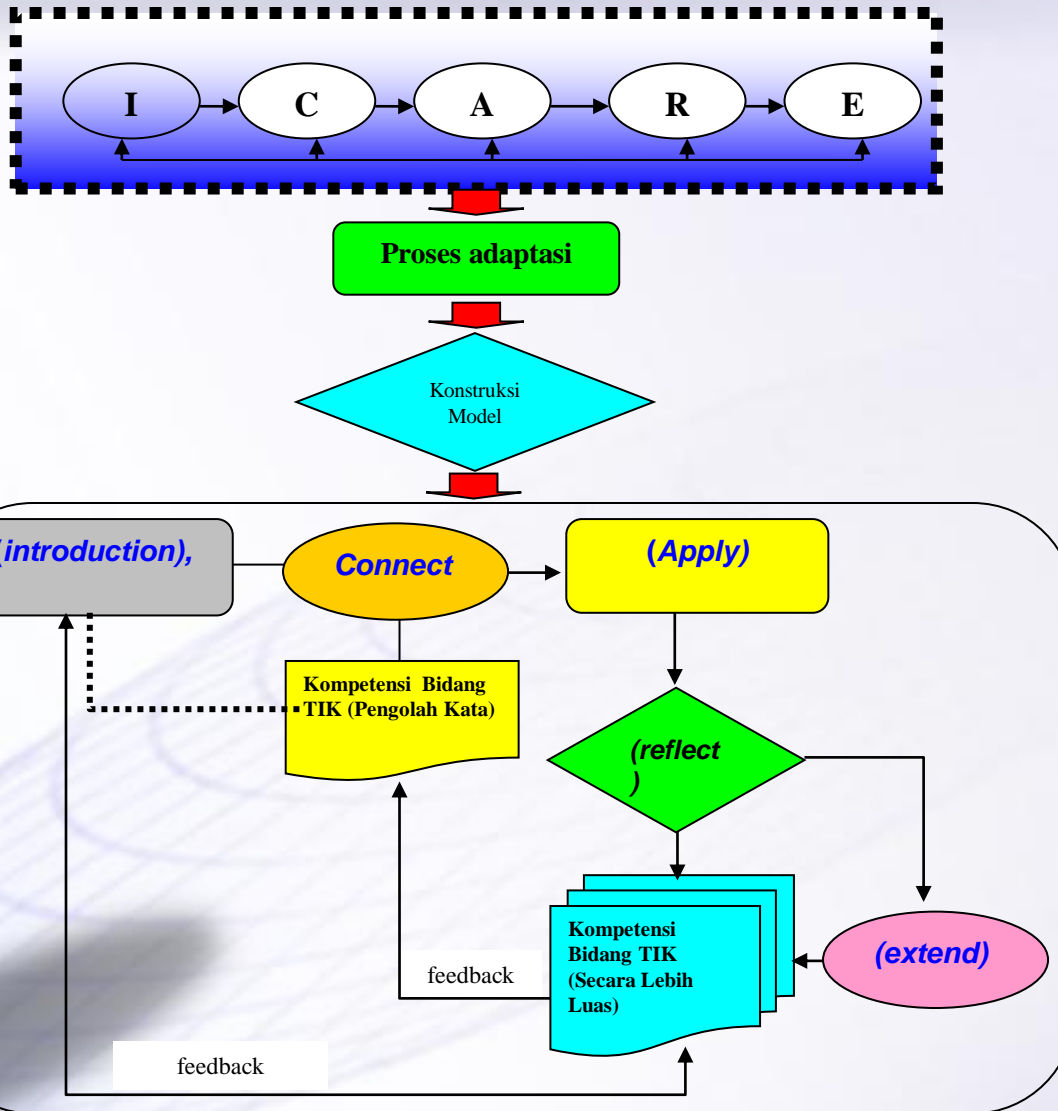
(3) Validation Model



DESAIN MODEL OF ICT ICARE MODEL



ICT ICARE MODEL IN YSS



FINDINGS

- *Findings show that ICARE based-ICT instructional model exerts positive effects and can be developed as a more meaningful and joyful ICT learning model.*
- *Based on statistical testing at 0,05 (95% significance level) and pretest and posttest score comparison, the study proves ICARE model influences the mastery of instructional materials.*



Validation Test Result

- *Validation test at the same significance level shows that in urban, semi-urban, and rural schools ICARE based- ICT learning model is much more effective than existing model currently used by the teachers.*



HASIL UJI EFEKTIVITAS MODEL ICARE DALAM PEMBELAJARAN TIK

| KATEGORI WILAYAH | TAHAPAN UJI COBA DALAM PENELITIAN & PENGEMBANGAN | | | SIGNIFIKAN |
|-----------------------------|---|--|---|-------------------|
| | TERBATAS | LEBIH LUAS | EFEKTIVITAS MODEL ICARE | |
| RURAL (Pedesaan) | Diperoleh Model “ICARE” yang Hipotetik | Rata-Rata Peningkatan Hasil Belajar 13,92 s/d 29,19 dari 30 Skor Maksimal | Mampu mencapai Skor sebesar 72,85 dari Skor Tertinggi 80. dan 63,00 dari Skor tertinggi 70. | Signifikan |

HASIL PENERAPAN MODEL ICARE DALAM PEMBELAJARAN TIK

| KATEGORI WILAYAH | TAHAPAN UJI COBA DALAM PENELITIAN DAN PENGEMBANGAN | | | SIGNIFIKAN |
|-----------------------------------|--|--|---|------------|
| | TERBATAS | LEBIH LUAS | EFEKTIVITAS MODEL ICARE | |
| SEMI URBAN (Perbatasan Desa-Kota) | Diperoleh Model Hipotetik | Rata-Rata Peningkatan Hasil Belajar mencapai 21,28 s/d 22,92 dari 23 Skor Maksimal | Mampu mencapai Skor sebesar 60,42 dari Skor Tertinggi 80. dan 83,33 dari Skor tertinggi 100 | Signifikan |



HASIL PENERAPAN MODEL "ICARE" DALAM PEMBELAJARAN TIK

| KATEGORI WILAYAH | TAHAPAN UJI COBA DALAM PENELITIAN DAN PENGEMBANGAN | | | SIGNIFIKAN |
|----------------------|--|--|--|------------|
| | TERBATAS | LEBIH LUAS | EFEKTIVITAS MODEL ICARE | |
| URBAN (Perkotaan) | Diperoleh Model Hipotetik | Rata-Rata Peningkatan Hasil Belajar mencapai 16,67 s/d 23,24 dari 25 Skor Maksimal | Mampu mencapai Skor sebesar 68,75 dari Skor Tertinggi 90. dan 85,42 dari Skor tertinggi 90. | Signifikan |



CONCLUSION

1. **ICARE based Instruction on ICT in YSS can be considered as an alternative effective leaning to develop and apply in school.**
2. **The ICARE Model stepping with : Design Model, Implementation Model, and evaluation Model .**
3. ***The ICARE based- ICT learning model that consist of introduction,connect, apply, reflect, and xtend is believed much more effective than existing model currently used by the teachers.***
3. **The ICARE based ICT learning model is more contextual teaching learning, life skills orientation, and lead students be more active and crative and make instruction to be more enjoyable.**



RECOMMENDATION

- ❑ **It is recommended to conduct comprehensive ICARE model to any other subjects in YSS, need close collaboration among school stakeholders, especially students, teachers, school committee and parents.**
- ❑ **The implementing ICARE model requires hard working, total and high commitment from teachers, master teachers, and all school stakeholders during the planning, implementation and evaluation stage of ICARE instruction model**



“..Curriculum or any innovative used model is only instrumental device. It may depend on how teachers to create, plan and implement the curriculum itself...”

THANK YOU

